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ABSTRACT

Synchronous computer-mediated communication (CMC), more commonly known in the Internet world as "chatting," has become an increasingly popular way to communicate for a variety of purposes. While CMC is still primarily recreational in character, educators are waking up to the possibilities of harnessing this activity for pedagogical purposes. The purpose of this study is to investigate the interactional and linguistic features of communication among intermediate level Spanish learners and their teacher in a synchronous CMC context. The study evoked some of the fundamental constructs of Vygotskian sociocultural theory in order to describe and explain how learners and their teacher collaborated with each other to co-construct meaning in chat rooms. General patterns of learner-learner and learner-teacher interaction were analyzed, as well as learner and teacher perceptions of the use of chat as a language learning tool, and finally, changes in learner output over time. The study found the following: (1) learners appropriated the chat room environment to create their own community of language practice in which they significantly influenced the tasks assigned to them; (2) learners and teacher had a variety of perceptions regarding the use of chat rooms in a second language learning class, which brought an "emic" perspective to the study; and (3) the Spanish verbal morphology system served as a springboard for illustration and discussion of changes over time. (Contains 106 references.) (KFT)

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SYNCHRONOUS COMPUTER-MEDIATED COMMUNICATION IN THE INTERMEDIATE FOREIGN LANGUAGE CLASS:

A SOCIOCULTURAL CASE STUDY

by

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BSEd., Millersville University of Pennsylvania, 1990

M.A., Millersville University of Pennsylvania, 1992

Submitted to the Graduate Faculty of
the Faculty of Arts and Sciences in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

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SYNCHRONOUS COMPUTER-MEDIATED COMMUNICATION IN THE INTERMEDIATE FOREIGN LANGUAGE CLASS: A SOCIOCULTURAL CASE STUDY

Martin Lynn Darhower, Ph.D.
University of Pittsburgh, 2000
Adviser: Dr. Bruce Stiehm ______________________

Synchronous computer-mediated communication (also known as *chatting*) has become an extremely popular Internet application in contemporary society, as a way to communicate electronically with persons from all corners of the globe. While members of academic and business communities are increasingly using synchronous CMC to hold serious discussions, conferences and classes, chat communication is still for the most part recreational in character (Werry, 1996). Only recently have educators come to realize that chatting may provide valuable learning experiences to its participants.

The purpose of this study was to investigate interactional and linguistic features of communication among intermediate-level Spanish learners and their teacher in a synchronous CMC context. The study evoked some fundamental constructs of Vygotskian sociocultural theory in order to describe and explain how learners and their teacher collaborated with each other to co-construct meaning in chat rooms. General patterns of learner-learner and learner-teacher interaction were analyzed, as well as learner and teacher perceptions of the use of chat as a language learning tool, and finally, changes in learner output over time. First, it was found that learners appropriated the chat room environment to create their own community of language practice in which they transformed tasks that were assigned to them, went off-task when they wanted to, and had the opportunity to make use of language functions that are not typical of the L2 classroom environment. Second, the learners and the teacher put forth a great deal of perceptions regarding the use of chat rooms in the L2 class, which brought an emic perspective to the study. Third, the Spanish verbal morphology system served as a springboard for illustration and discussion of changes in learner output over time. Specifically, learners made unique uses of the Spanish verbal morphology system, which the emergent grammar perspective was called upon to explain. Also, learners branched out from overuse of the Spanish present tense, gradually using the other available verb tenses and moods more of the time. The study suggests pedagogical uses for synchronous CMC, as well as future research directions.

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CHAPTER 1
INTRODUCTION

This introductory chapter will situate the research project within the current second language acquisition (SLA) literature, explain the rationale for the study, and present a statement of the research problem. The chapter will conclude with a short summary of key elements presented in the research.

Introduction

The second/foreign language teaching profession[1] has seen some rather profound transformations in the last two decades. Since the coining of the concept of communicative competence (Campbell & Wales, 1970; Hymes, 1972) and the appearance of communicative approaches to L2 teaching, the process of learning a L2 in the classroom has been expanded far beyond the practice and memorization of grammar rules. Many practitioners and researchers now view the classroom not only as a linguistic, but also a *social* environment: "As in learning a native language, learning a foreign language is also a tacit process of socialization that comes about through social interaction" (Brooks, 1990, p. 166). Current teaching methodologies incorporate practices aimed at the acquisition of communication skills in addition to grammatical knowledge. In communicative classrooms, therefore, learners are often engaged in meaningful discourse with the teacher and other learners.

A recently developed SLA research approach is the post-Vygotskian sociocultural theory (SCT) paradigm. This paradigm differs from other mainstream SLA research in its emphasis on the social over the individual aspect of cognitive and language development. Sociocultural SLA research illuminates L2 learning in the context of its online development while the learner carries out specific cognitive tasks with other individuals involving language (such online development is referred to as *microgenesis*). The primary interest to the SCT researcher is the social context in which language development occurs among learners. As such, the SCT research agenda complements other prevalent SLA paradigms which focus their efforts mainly on the mind-internal features of SLA, whether innate or learned.

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[1] In this dissertation, the terms "second language" (or "L2") and "foreign language" will be used interchangeably, unless it should become necessary to distinguish between the two.

Much of Vygotskian sociocultural theory speaks of the individual's cognitive development as mediated by *psychological tools* (Vygotsky, 1962). An important branch of SLA research in the last few years has been that of the use of the computer as a language learning tool. In computer-assisted language learning (CALL) research, scholars and teachers explore the theoretical and pedagogical possibilities that the computer has to offer L2 learners. A subset of CALL is computer-mediated communication (CMC), in which the computer is a tool that provides its users with an electronic communicative environment. The current study will marry CMC research with the SCT theoretical framework in an effort to illuminate the specific ways that CMC functions as a tool which mediates L2 learning in two classes of intermediate-level Spanish as a foreign language.

Rationale for and Significance of the Study

This study seeks to shed light on the nature of synchronous CMC within the framework of sociocultural theory with specific reference to the constructs of mediation, psychological tools, intersubjectivity and activity theory. An essential assumption of SCT is that discourse shapes learning. In L2 learning, this implies that language is both a tool and a target of activity (Meskill, 1999, p. 141). Another assumption is that understanding the sociocultural nature of the instructional context is necessary to understand the actions, discourse, and thinking within that context. This study therefore will attempt to understand how learners and their teacher utilize synchronous CMC in a L2 learning environment.

Johnson (1991) has noted that the majority of publications on computers and learning in educational environments focuses on the cognitive aspects of learning. SLA theory and classroom research, however, has been emphasizing for some time how social interactional features of the classroom environment affect language learning

(Johnson, 1991, p. 62). While computers have done an excellent job of providing drills and storing and retrieving large amounts of information for users, few programs, if any, are able to provide the genuinely communicative environment that is seen as necessary for acquisition. Synchronous CMC is one type of computer application that can overcome this obstacle, since individuals using synchronous CMC actually communicate with other individuals rather than with the computer.

There is a need for further research on CMC, as Salaberry (1999) points out: "In contrast, when computers are conceptualized as tools, the focus is on how well the tool helps the user accomplish the task, not how well the computer can teach. In this regard, the analysis of computer mediated communication, including the analysis of learners' use of technical components that render CMC possible, deserves to be at the forefront of future research agendas" (Salaberry, 1999, p. 104). Meskill also mentions a need for research into "real time sociocollaborative discourses of intact language learning classroom communities", which would contribute a great deal to both the SLA research and practitioner communities (Meskill, 1999, p. 159).

A better understanding of discourse within a synchronous CMC environment will entail looking at such discourse over a period of time in order to identify the interactional features as they unfold in real time and as they develop over time. If research is able to provide more in depth insight into the nature of synchronous CMC, research can then inform pedagogy, specifically regarding ways to extract maximum pedagogical benefits from synchronous CMC. With its emphasis on learner interests and motivations as well as imposed educational goals, sociocultural theory is a robust framework within which to frame a study on learner use of synchronous CMC as a language learning tool.

Statement of Problem

Discourse in the L2 classroom has been broadly studied in the SLA literature of the last two decades. Prior to the development of synchronous CMC, however, "discourse" had always been conceived of as oral interaction or writing. Considering the rapidly growing use of synchronous CMC, or chatting, it behooves researchers of language and communication to investigate the discourse that occurs in this new medium of communication.

The purpose of this study is to investigate the nature of learner and teacher interaction in a synchronous CMC environment situated within an intermediate-level college Spanish course. General interactional patterns will be analyzed, as well as the effects of structured versus open-ended communicative tasks, learner and teacher perceptions of the use of synchronous CMC as a communication and language learning tool, and finally, any changes in learner output over time will be analyzed. It is hoped that the combination of these research objectives will provide a thorough insight into the mediational nature of synchronous CMC as a language learning tool.

Summary

This chapter has introduced the background of the current study, presented a rationale for the study, and stated the research problem that the study addresses. The study will call upon sociocultural theory to shed light on the nature of communication that takes place between teachers and learners within a synchronous computer-mediated medium (chat room). The study therefore aims to contribute to the body of literature on sociocultural views of SLA, as well as the growing body of literature on synchronous CMC.

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter will review the SLA literature pertinent to the current study. The sociocultural theoretical framework will be explained, along with the additional supporting concepts of learner discourse and task in the L2 classroom, and emergent grammar. Relevant concepts and research in CALL and synchronous CMC will also be reported. The chapter will end with a summary and an explanation of how this study seeks to complement the current literature.

Theoretical and Conceptual Framework: Vygotskian Sociocultural Theory

Since the advent of communicative language teaching, the role of interaction in SLA has been of great interest to researchers and practitioners. Learner-teacher and learner-learner interaction have been analyzed extensively in order to uncover the underlying psycholinguistic processes of SLA. Much of this research has been carried out within the interactionist framework (Long, 1980, 1981, 1985). According to the interactionist view of SLA, language is acquired by means of receiving messages from an interlocutor, decoding such messages for meaning, and sending messages in response. The received messages are referred to as language input, and the sent messages are referred to as output. The interactionist framework focuses heavily on the linguistic content of input and output, striving to link the two in a comprehensive psycholinguistic model of SLA (Gass, 1997). An important intermediate step that is believed to lead to acquisition during interaction is the negotiation of meaning, which, according to Long and his colleagues, is what makes input comprehensible to the learner. This was an important addition to Krashen's model, which placed a great deal of emphasis on comprehensible input, but paid no attention to interaction or output (Krashen, 1981).

In the 1980s some SLA researchers began to incorporate the ideas of the Russian psychologist and semiotician Lev Vygotsky (1896-1934) into their research agendas. Known as sociocultural theory, this new SLA research paradigm contrasts with the currently prominent interactionist paradigm, in that sociocultural theory (SCT) places emphasis on the social, rather than the linguistic variables of human interaction. Whereas the interactionist view puts forth that language is a system of rules in the brain, for the sociocultural theorist language is a symbolic system originating *outside* of the individual's mind, i.e., in social interaction. Interaction is interesting to the interactionist researcher in terms of the linguistic characteristics of input directed toward a language learner, the linguistic characteristics of the output generated by the learner, and the steps in between, during which linguistic rules are acquired by the learner. Sociocultural theory also speaks of interaction, although in a different way than in interactionist theory. Sociocultural theory views interaction as a mediator of language learning, primarily as a byproduct of the socialization between two or more individuals as they co-construct meaning using language. This section will outline the fundamental tenets of SCT and will show why SCT is an appropriate framework to employ in an analysis of chat room communication in the second/foreign language classroom environment.

Sociocultural theory operates on the assumption that human development is highly dependent upon the social context within which it takes place. Development occurs as the result of meaningful verbal interaction between novices and experts in the environment, be they parents, older peers, or teachers (Vygotsky, 1962, 1978). Whereas these ideas may not be argued by other prevalent SLA theories, sociocultural theory distinguishes itself from other approaches to SLA in its particular emphasis on the social rather than the linguistic aspect of language development. SCT emphasizes that the locus of learning is not exclusively within the individual's mind but rather extends outside of the learner, specifically within social interaction with other individuals. Although Vygotsky's theory embraced all higher mental functions, he was primarily interested in the development of language in its relation to thought (Vygotsky, 1962, 1978). Vygotsky distinguished between lower mental functions, such as elementary perception, memory, attention, and will, and the higher, or cultural functions, such as logical memory, voluntary attention, conceptual thought, planning, and problem solving. Vygotsky explains that higher mental functions appear as a result of transformations of the lower functions (Vygotsky, 1962, 1978). To explain how higher mental functions evolved from lower mental functions, Vygotsky invoked the constructs of *mediation* and *tools*.

Mediation and the Use of Tools

In order for transformations from lower to higher mental functions to occur, the individual makes use of psychological tools, such as mnemonic techniques, algebraic symbols, diagrams, schemes, and, perhaps most importantly, language. These psychological tools function as mediators, or instruments that stand between the individual and the goal toward which the individual's action is directed. Vygotsky's claim was that just as individuals employ technical tools to manipulate their environment, they use psychological tools to direct and control their physical and mental behavior. Higher mental functions, then, must be viewed as products of mediated activity, of which language is one of the principle tools or mediators. Applying these concepts to the L2 learning context, one could view Chomskyian principles such as universal grammar and principles and parameters as innate or lower biological processes. Through various mediational means, such as provision of positive and negative linguistic evidence by more knowledgeable peers, development of learning and communication strategies, the lower biological language processes develop into higher forms of language use, i.e., discourse competence. In other words, higher psychological processes are learned from the culture and derived from social interactions in meaningful social activities.

An underlying assumption of the mediation construct is that humans have access to the world only indirectly, or mediately, rather than directly, or immediately (Wertsch, del Rio, & Alvarez, 1995, p. 21). This applies to how humans obtain information about the world, as well as how they act on the obtained information. Mediation is an active process that involves the potential of cultural tools to shape human action, as well as the unique use of such tools. It is worth pointing out that the introduction of new cultural tools (such as computers) *transforms* the mediation process, rather than simply facilitating forms of action that would otherwise occur (Wertsch et al., 1995). As Vygotsky stated: "By being included in the process of behavior, the psychological tool alters the entire flow and structure of mental functions. It does this by determining the structure of a new instrumental act, just as a technical tool alters the process of a natural adaptation by determining the form of labor operations" (Vygotsky, 1981, p. 137).

Donato and McCormick argue the importance of mediation in L2 learning: "initially unfocused learning actions may become adjusted and modified based on how the learning of the language is mediated. Mediation is, thus, the instrument of cognitive change" (Donato & McCormick, 1994, p. 456). Donato and McCormick suggest several examples of potential mediators (or tools) in L2 learning, including textbooks, visual material, classroom discourse patterns, opportunities for L2 interaction, types of direct instruction, and various kinds of teacher assistance. Researchers in CALL would add the computer to this list. Meskill considers the computer to be a complex artifact that, "like all contextual artifacts, especially tools used by members of a particular community...bring about major change in the structure and dynamics of discourse and activity" (Meskill, 1999, p. 154). Wertsch suggests that mediational means be viewed in terms of items that make up a *tool kit*, rather than being viewed as a single, undifferentiated whole (Wertsch, 1991) . The current study seeks to shed light on the theoretical and pedagogical implications of including synchronous CMC as an item in the foreign language learning tool kit.

Regulation and the Zone of Proximal Development (ZPD)

Higher psychological functions, according to Vygotsky, originate outside the individual, in interpersonal relations, and are symbolically mediated by language. At some point this external, sociocultural activity is transformed into internal, mental functioning, as Vygotsky explains:

> Any function in the child's cultural development appears, twice, or on two planes, first it appears on the social plane, and then on the psychological plane, first it appears between people as an interpsychological category, and then within the child as an intrapsychological category (Vygotsky, 1981, p.163).

Within the interpersonal relations between adult and child, concept formation by a child is brought about in cooperation with the adult, who attempts to operate within the child's zone of proximal development (ZPD), defined as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotksy, 1978, p. 86). The process of transforming lower mental functions into higher mental functions is referred to by Vygotsky as *regulation*. In working within the ZPD, the adult helps the child move from a state of being *object-regulated* to eventually becoming *self-regulated*. When children are object-regulated, they can engage in actions directed toward a decontextualized goal only if their mental processes are mediated by an adult. At the next stage of development, children are able to carry out certain tasks, but only within linguistically mediated assistance from a parent, or older or more capable peer. At this stage the metacognition of the child is controlled by a surrogate who has the ability to perform the task. This stage is called *other-regulation*. Eventually, the child achieves *self-regulation* by taking over more responsibility for strategic functions. When a learner has reached self regulation, he or she is able to carry out cognitive tasks on his or her own, with very little, if any assistance from a more capable peer. In attempting to work within the ZPD, the adult provides assistance to the child to help her or him to move from object-regulation to self-regulation. Such assistance is commonly referred to in the literature as *scaffolding* (Wood, Bruner, & Ross, 1976).

The regulation and ZPD metaphors have enabled SLA researchers to expand sociocultural theory to both child and adult L2 learning. Guerrero and Villamil (1994), for example, found that peer revision of writing assignments was greatly affected by the state of regulation of the individual learners (Guerrero & Villamil, 1994). Analyzing dyads of English as a second language learners engaged in a composition revision task, these researchers were able to identify the regulated state of learners according to their ability to handle the revision task. For example, learners who were not able to understand the purpose of the revision task, or did not possess the necessary language skills to carry out the task were considered to be *object-regulated* for this task. *Other-regulated* learners for this same task were able to undertake the revision process with the guidance of their peers, by accepting peers' suggestions and recognizing, to some extent, trouble sources in their own writing. Finally, *self-regulated* learners had internalized the task requirements and were capable of independent problem-solving. Guerrero and Villamil determined that asymmetrical dyads consisting of one self-regulated learner and one other-regulated learner were most productive in their revisions, whereas symmetrical interactions between two object-regulated or other-regulated learners were comparatively ineffective. In a study framed within the ZPD, Adair-Hauck and Donato demonstrated how grammar instruction aimed at the learners' ZPD gradually enabled learners to solve grammatical problems on their own (Adair-Hauck & Donato, 1994). In another study, Donato's learners working in small groups collectively scaffolded each other and succeeded in a communicative task that they may not have been able to accomplish individually (Donato, 1994). Such research findings support the robustness of these sociocultural constructs in illuminating the discursive, social nature of L2 learning.

Scaffolding

In Vygotskian terms, L2 learning is brought about through language use in collaborative discourse. More knowledgeable peers determine the ZPD of less knowledgeable peers in a given task and scaffold the less knowledgeable peer until she or he is able to complete the task with gradually less assistance. Wood, Bruner, and Ross (1976) operationalize the scaffolding metaphor in terms of six specific functions:

1) *recruitment*: drawing the novice's attention to the task and its requirements.
2) *reduction in degrees of freedom*: simplifying the task into sub-tasks that still allow the novice to reach a solution
3) *direction maintenance*: helping to keep the novice motivated and working toward the overall task goal.
4) *marking critical features*: calling the novice's attention to important aspects of the overall task, in particular when a mismatch between the novice's work and the expert's preferred solution exists.

5) *frustration control*: decreasing the stress on the novice without encouraging the novice's dependency on the expert.

6) *demonstration*: modeling the ideal procedure to achieve the goal of the task.

(Wood, Bruner, & Ross, 1976, p. 98; quoted in McCormick, 1995).

In the SLA literature, the scaffolding metaphor is most often applied to teacher-student interaction in the classroom. Donato (1994), however, showed that learners engaged in collaborative discursive activity are capable of scaffolding each other in order to jointly complete an activity that they may not have been able to complete individually (Donato, 1994). In the CALL literature, Johnston and Milne (1995) extended the scaffolding construct beyond the classroom discourse context in a research study that utilized video recordings of native French speakers on a laser disk. The recordings were accompanied by additional grammatical, lexical and pronunciation support on learner demand by remote control. The researchers found a significant increase in communicative discourse (39%) in their first-semester learners and 55% increase in second semester French learners over classes where this type of scaffolding was not supplied (Johnston & Milne, 1995). Scaffolding is considered in SCT to be an important discursive function in that it facilitates the advancement of the learner along her or his ZPD.

Intersubjectivity

Communication requires a shared context. When interlocutors have similar background knowledge of a topic of conversation, the context may already be shared. If not already present, the shared context must be created (Rommetveit 1974). In his philosophy of language, Habermas refers to the concept of shared perspective as *intersubjectivity* (White, 1995). Rommetveit (1974, 1985) brought the term into the field of psychology, referring to intersubjectivity as the establishment of a shared perspective between an expert and a learner in a problem-solving task (Rommetveit, 1985). Rommetveit believed that message structure should be explored within the conceptual framework of the spatial-temporal interpersonal coordinates of a speech act. He described an intersubjectively established "here-and-now", which occurs whenever one interlocutor makes something known to another, thus temporarily bringing together their different, but partially shared, social worlds (Rommetveit, 1974, pp. 39-40). According to Wertsch, reaching intersubjectivity is something that communicants learn to do (Wertsch 1979, 1991). The establishment and negotiation of intersubjectivity perpetuates collaborative discourse, which according to the sociocultural view is important for language development.

Habermas spoke of intersubjectivity as a fundamental concept of what he terms "universal pragmatics" (Habermas, 1998). The task of universal pragmatics, according to Habermas, is to identify and reconstruct universal conditions of possible mutual understanding (Habermas, 1998, p. 21). Habermas explains that language is the specific medium of reaching understanding at the sociocultural stage of evolution, which is why he singles out speech actions from other forms of communicative action in his discussion of universal pragmatics. Habermas developed a speech act theory on the basis of four universal validity claims. Anyone who wants to participate in a process of reaching understanding must follow these validity claims:

(a) uttering something intelligibly
(b) giving (the hearer) something to understand
(c) making herself thereby understandable, and
(d) coming to an understanding with another person (Habermas, 1998, p. 22).

Habermas rightfully points out that it is not a normal state of linguistic communication that all of these conditions are met all of the time. Therefore it is necessary to analyze the process of reaching an understanding (or intersubjectivity) from the dynamic perspective of *bringing about* agreement (Habermas, 1998, p.23). When at least one of the validity claims is not satisfied, communicative action cannot be continued. In other words, intersubjectivity is lost. When this happens, interlocutors must achieve a new definition of the situation that all participants can share, if communication is to continue. If the attempt to reestablish intersubjectivity fails, then the communicators are faced with switching to some sort of strategic action, breaking off communication altogether, or recommencing action oriented toward reaching understanding at a different level.

In the literature on social theory, Schegloff studied the process of "defending" intersubjectivity within a certain number of conversational turns, which he referred to as a turn-taking "repair space" (Schegloff, 1992). According to Schegloff, repair of lost understanding must generally occurs within three turns of the trouble source. If the repair attempt is made after three, or sometimes four, turns, then the repair becomes "next relevant" (Schegloff, 1992, p. 1325). The problem with becoming next relevant is that the repair may never again be relevant.

The concept of intersubjectivity has been applied to the context of communicative tasks in some recent sociocultural SLA studies. Brooks and Donato (1994) demonstrated that dyads of high school Spanish learners engaged in a communicative task achieved a *shared orientation*, or common definition of the task, which helped them to complete the task (Brooks & Donato, 1994). These researchers delineated three degrees of task-orientation. *Non-compliance* refers to a state in which the learners have not achieved shared orientation regarding the task. *Compliance* is a coerced state of task-related shared orientation, in which learners perform the activity but are not engaged in it. Finally, *engagement* is a state of shared orientation in which interlocutors connect to each other and to the task as meaningful activity. Brooks and Donato's study suggests that true intersubjectivity only occurs when learners reach the level of engagement. When learners are *engaged* in a communicative activity, according to Brooks and Donato's criteria, they also meet all of Habermas' criteria for shared understanding: they put forth intelligible utterances; they give (the hearer) something to understand; they make themselves understandable, and they come to an understanding with each other.

Investigating the sociocognitive functions of the use of the L1 in communicative tasks, Antón and DiCamilla (1998) also applied the construct of intersubjectivity. They demonstrated that their dyads of Spanish L2 learners used their L1 (English) to "...construct a social space that will facilitate the completion of the task by enabling learners to achieve intersubjectivity, that is, a shared perspective on the task" (Antón & DiCamilla, 1998, p. 327). They further characterize this state of task intersubjectivity as a "social and cognitive workplace, in which the students are able to provide each other with help throughout the task" (Antón & DiCamilla, 1998, p. 327). Antón and DiCamilla also stressed the importance of maintaining intersubjectivity throughout a communicative task.

Intersubjectivity has been the subject of recent discussion in sociocultural circles. Wells questions the extent to which agreement or shared perspective must be maintained for participants to collaborate in activity (Wells, 1998). In his view, it is not the maintenance, but rather the failure of intersubjectivity and the subsequent "contesting of the alternatives", that promotes language learning. Wells also points out the multifaceted nature of intersubjectivity: "it is concerned with the interpersonal as well as with the ideational macrofunctions, in Hallidayan terms (Halliday, 1978); with intentions and goals as well as with the meanings of lexico-grammatical items; and with the personal sense as well as with conventional reference" (Wells, 1998, p. 350). Wells concludes that "...interaction always involves the ongoing negotiation of all these aspects of the participants' individual and collective construal of the situation, of which the text they produce is both the mediator and the trace" (Wells, 1998, p. 350).

Intersubjectivity appears to be a useful construct to illustrate if and to what extent L2 communicators are able to achieve mutual understanding with each other. Bringing about mutual understanding allows L2 learners to put forth their own subjective reality to be understood by others, and therefore either alter or reinforce the other's subjective reality. Illustrating intersubjective states among L2 learners is useful in that it demonstrates to what extent learners are able to use their L2 to co-construct meaning with each other. Achieving an intersubjective state can also be seen as a prerequisite for activating and working within the learner's ZPD, which is where sociocultural theorists believe that development takes place.

Activity Theory

Some of Vygotsky's students began to disagree with Vygotsky's position regarding symbolic mediation of mental life, putting forth the idea that mediation arises fundamentally from practical activity within the world of objects

(Kozulin, 1990, p. 245, cited in Lantolf and Appel, 1994, p. 16). This idea, explicated mainly by A.N. Leont'ev, gave birth to a post-Vygotskian theory known as activity theory (Leont'ev, 1981). According to Wertsch (1985, cited in Lantolf and Appel, 1994a, p. 17), activity theory seeks to answer the question, "What is the individual or group doing in a particular setting?"

Leont'ev elaborated a response to this question within a framework consisting of three levels of analysis: *activity*, *action* and *operation*. Activity, the highest level of analysis, is defined as "the social institutionally determined setting or context based on the set of assumptions about the appropriate roles, goals, and means to be used by the participants in that setting" (Lantolf & Appel, 1994a, p. 17). Examples of activity include play, work, education, and worship (Lantolf & Appel, 1994a, p. 17). In the classroom setting, Wells states that activity characterizes curricular events from the teacher's (implicit) theory of education (Wells, 1999, p. 171). Leont'ev stated the importance of *motive* in activity, believing that without a motive, there could be no activity (Leont'ev, 1981).

The second level of activity theory is *action*. Actions can be embedded in different activities, which are regulated by goals. Activity, then, is best seen as goal-directed action. Goals can in turn be divided into subgoals. Once goals are formed, they are not necessarily stable. That is, an individual can modify, postpone, or even abandon goals altogether (Lantolf & Appel, 1994a, p. 19). In the educational setting, action characterizes classroom events in terms of their immediate goals and the sequence of sub-actions needed to perform them (Wells, 1999, p. 171). Wells also highlights the idea that spoken discourse is an important semiotic tool that participants use to achieve the goal of action (Wells, 1999, p. 172).

The final level of activity is *operations*, which determine the physical or mental means by which an action is carried out. There may be several operational means available to achieve any given goal, depending on the actual circumstances and conditions under which a goal is realized. Operations, once carried out several times, usually become automatized procedures. Classroom operations, according to Wells, are the actual unfolding of classroom events, "with particular emphasis on the interaction that occurs, both among the participants and between the participants and the various artifacts that are involved in performing the actions(s)" (Wells, 1999, p. 171).

In summary of the three levels of activity theory, the motive answers why something is done; the goal answers what is done; and the operations answer how it is done. Activity theory is a useful construct to apply in the study of SLA, particularly since "task" has been an area of great importance in SLA research for well over a decade (see discussion below). In an article titled "Same task, different activities: Analysis of SLA tasks from an activity theory perspective", Coughlan and Duff (1994) make the important point that in SLA research it cannot be assumed that research (and pedagogical) tasks are constant. That is, when L2 learners are given an experimental task to perform, they will not necessarily perform the task in the same way as other learners, due to the divergent motives, goals and operations that each learner brings to the given task. These researchers point out that when individuals engage in a task, they are also engaging in the "larger, multi-level segment of human activity" that Leont'ev spoke of (Coughlan & Duff, 1994, p. 174). In their study, they used a picture description task of the type that are commonly used in SLA studies to elicit certain language structures or lexical items. In their analysis of different subjects performing the same picture description, they make the following enlightening observation:

> Even with a relatively controlled task, a range of discourse types may result from subjects' multiple interpretations of that task, their desire (as well as that of the researcher) to establish interpersonal bonds with their interlocutor, their attempt to make the picture description task a more interesting one by evaluating events, making comparisons to personal experience, playing language games, and so on (Coughlan & Duff, 1994, p. 185).

The important lesson to be learned here is that the outcome of a task cannot necessarily be predetermined, since the activity that evolves from a given task comprises the behavior produced by individuals with their own set of objectives and in their own sociocultural context. This is in contrast to current interactionist views of language tasks, which view the task as a vehicle for presenting specific linguistic information and eliciting specific linguistic information in turn (e.g., Crookes, 1993; Lee, 1999; Lee & VanPatten, 1995).

Summary

SLA researchers in the Vygotskian sociocultural tradition believe that sociocultural theory enables researchers to illuminate the process of learning a L2 in a way that other SLA research paradigms are unable to do. As Donato and McCormick put it, "We believe that this perspective goes beyond current cognitive and social psychological conceptions of strategic language learning....The sociocultural perspective, on the other hand, views language learning tasks and contexts as situated activities that are currently under development and that are influential upon individuals' strategic orientations to classroom learning" (Donato & McCormick, 1994, p. 453). In the CALL literature, Kern asserts that Vygotsky's and Bakhtin's theories, with their emphasis on social interaction in understanding and learning, "can help us to reconceptualize the role of computers in language teaching" (Kern, 1996, p. 107). The current study aims to further such insights into the intersection of sociocultural theory and computer-mediated L2 learning.

Discourse in the L2 Classroom

Since the advent of communicative language teaching theories and methodologies, the role of classroom discourse has moved to the fore of SLA research. Important issues in classroom discourse include interactional patterns that occur during teacher-learner discourse as well as learner-learner discourse, and more importantly, how such interactional patterns may affect L2 learning. This section will highlight some important concepts concerning discourse in L2 learning.

Teacher-Learner Discourse

Discourse patterns within the foreign language classroom setting have been a research agenda of SLA scholars interested in the effects of classroom interaction on learning (Johnson, 1995). Johnson considers the classroom to be a unique communicative context in which communication is shaped by the perceptions of teachers and learners who participate in classroom activities (Johnson, 1995, p. 5). She further explains that the structure of foreign language classroom communication is easily recognizable: Teachers tend to control the discussion in terms of what counts as a relevant topic to discuss, and who may participate and when. Teacher beliefs about their role in the classroom as well as the role of learners, coupled with teacher theoretical beliefs about how languages are learned, are what guide teachers' control of classroom communication. Teachers typically retain control by means of a question-answer mode of interaction.

A well-documented question-answer interactional pattern in foreign language classrooms is known as the IRE sequence (sometimes referred to in the literature as IRF, with "F" referring to feedback) (Mehan, 1979; Sinclair & Coulthard, 1975). In IRE interaction, the teacher initiates a topic by means of a question, the learner responds to the question, and the teacher in turn evaluates the learner response. In the sociocultural view of teacher-learner interaction, classroom discourse patterns should go beyond the IRE sequence. Specifically, teacher-learner discourse involves the activation of the learners' ZPD (usually, but not necessarily, by the teacher), and the provision of verbal scaffolding to help learners along their ZPD. This calls for much more on the teacher's part than evaluating each learner utterance for correctness. In collaborative teacher-learner dialogue, it is incumbent on the teacher to support learner contributions to the dialogue and to use learner ideas as links to new knowledge (Palinscar, 1986). Thus, if the "E" in the IRE sequence became more of an *expansion* than an evaluation, then learner contributions actually become part of the dialogue (Johnson, 1995, p. 75), and allow intersubjective communication to take place.

Learner-Learner Discourse

When the study of discourse began to take prominence in the SLA literature, it was most often teacher-learner discourse that was studied. This stems, perhaps, from a time honored tradition of viewing the teacher as transmitter of knowledge and the learner as recipient of teacher knowledge. Also, for pedagogical reasons, language teachers might not prefer to set learners free to engage in discourse without the presence of the teacher, for fear that learners will pick up each other's errors. Recently, however, a research interest in learner-learner discourse has surged. Sociocultural SLA studies have demonstrated that learners are able to maintain collaborative discourse on their own, to achieve intersubjectivity within a given task, and to collectively scaffold each other much in the same way that the teacher scaffolds them (Antón & DiCamilla, 1998; Donato, 1994; Guerrero & Villamil, 1994; Guerrero & Villamil, 2000). These findings suggest that there are both research and pedagogical benefits to engaging learners in discourse with each other.

Summary

This section has briefly described the role of teacher-learner and learner-learner interaction in classroom discourse. It was stated that teacher-learner discourse in many classrooms follows a detectable pattern known as "IRE". In a sociocultural framework, however, teacher-learner interaction is viewed as collaborative dialogue in which the teacher provides scaffolding to the learner and thus facilitates the learner's language growth. Finally, it was mentioned that learner-learner discourse is also of interest to sociocultural theory, in light of recent research findings that learners in collaborative dialogue with each other can take on roles previously attributed only to teachers.

The Role of Task in the Communicative Classroom

It is now generally assumed among SLA scholars and practitioners who support the tenets of communicative language teaching, that language learners must actively engage in communication in order to learn to communicate in their L2. This critical assumption underlies the following discussion of the role of task in the communicative language classroom, as tasks have come to be considered a major catalyst in promoting the type of classroom discourse that facilitates L2 learning.

Definition and Description of Task

The major shift in SLA theory from the behaviorism-based audiolingual method to communicative language teaching implied drastic changes in classroom instruction. Still tied to the habit-forming tenets of audiolingualism, at first language teachers saw "communication" as an additional opportunity (in addition to mechanical drills) for learners to practice or demonstrate their knowledge of recently-taught language structures. As early as 1975, though, Wagner-Gough and Hatch pointed out that the function of conversation in the L2 classroom was not the mere *practice of structures*, but rather was the *locus of the development* of the learner's linguistic system (Wagner-Gough & Hatch, 1975). In other words, communication is not a vehicle for practicing grammatical structures, but rather, grammatical structures are tools to be employed in bringing about communication. It is now commonly recognized that communication in the L2 is the means by which learners acquire language. As Lee and VanPatten put it: "[C]ommunicative language ability — the ability to express one's self *and* to understand others — develops as learners engage in communication and not as a result of habit formation with grammatical items" (Lee & VanPatten, 1995).

Even though communication began to be emphasized in the SLA literature and in L2 classrooms, there was still an adherence to the traditional notion that grammatical structures are the crux of L2 teaching and learning. L2 textbooks began to include an increased quantity of "communicative" activities, but the chapters were still organized around discrete grammatical structures. In the 1970s a strand of SLA research known as the "morpheme order studies" (Dulay & Burt, 1974) provided telling evidence that L2 learners go through somewhat fixed orders of acquisition of L2 structures, which is relatively unaffected by the L1 as well as by *instruction*. In other words, teachers can teach, drill and practice discrete grammatical structures in the classroom, but if learners are not cognitively prepared to acquire the taught structures, they will not acquire the structures, regardless of the fact that they may have comprehended and/or produced those structures in a given class period. These findings, as well as the need to create optimal communicative conditions for L2 classrooms, led to what is now known as *task-based instruction* or *task-based language teaching*.

The term "task" is often employed with a variety of definitions in the SLA literature (Crookes & Gass, 1993; Lee, 1999, p. 30). Some researchers might consider that anything done in the classroom, for example, can be considered a task. Most researchers and practitioners, however, understand a task to include specific communicative goals which are achieved by means of language (see Lee, 1999, p. 31, for a review of definitions). Confronted with empirical evidence that instruction makes little difference in the order of acquisition of grammatical structures, Long and Crookes adopted the task as the unit of analysis for L2 syllabuses, rather than the traditional structural syllabus (Long, 1985). Long and Crookes do not suggest that learners acquire their L2 one task at a time, any more than they do one structure at a time. Rather, they claim that tasks "provide a vehicle for the presentation of appropriate target language samples to learners — input which they will inevitably reshape via application of general cognitive processing capacities — and for the delivery of comprehension and production opportunities of negotiable difficulty" (Long & Crookes, 1993, p. 39). In the task-as-unit of analysis model, language lesson goals become the accomplishment of a certain task, rather than practice and demonstration of mastery of the grammar structure of the day.

Lee and VanPatten (1995) and more recently Lee (1999) advocate the restructuring of classroom communication in terms of information-exchange tasks. Citing Savignon, they define communication as "the expression, interpretation, and negotiation of meaning" (Lee & VanPatten, 1995). Any activity that falls short of this definition is not a communicative activity. Lee and VanPatten argue that classroom communication, like real-world communication, must have a purpose, be it psycho-social (social or psychological bonding with someone) or informational-cognitive (to obtain needed information). The best way to bring about communication in the classroom, according to these researchers, is to establish defined communicative tasks. Lee defines *task* in the following manner:

> A *task* is a classroom activity or exercise that has (a) an objective attainable only by the interaction among participants, (b) a mechanism for structuring and sequencing interaction, and (c) a focus on meaning exchange; (2) a language learning endeavor that requires learners to comprehend, manipulate, and/or produce the target language as they perform some set of workplans (Lee, 1999, p. 30).

In Lee's view, then, tasks go beyond practicing language for its own sake, in that tasks require language use as a means to an end.

The sociocultural theory SLA literature also speaks of task, although what is of importance to the sociocultural theorist is the language activity that occurs as learners socially engage in the construction of tasks rather than the specific input and output that is generated in the task. When sociocultural theorists utilize language tasks in their studies, they do so with a different set of constructs (mediation, ZPD, etc.) from those used in the interactionist framework. This study will employ tasks typical of the interactionist perspective, since these types of tasks are common to today's communicative L2 classrooms, including the ones which were part of this study. In analyzing learner language activity during the tasks, however, a sociocultural theory approach will be utilized.

Task Design for the L2 Classroom

Most intermediate college-level foreign language texts provide classroom activities that progress along a continuum beginning with a tight control of linguistic structures and ending with open-ended discussion questions. Basing himself on empirical evidence of previous research, Lee argues that "[o]pen-ended discussion questions are questionable, if not unreliable, pedagogical tools for promoting language development in second language learners" (Lee, 1999, p. 33). The open-ended question model of classroom discourse seems to operate on the assumption that communication is merely a question and answer process, which has been shown to foster less interaction and negotiation of meaning among learners than task-based activities. Lee therefore concludes that "[t]ask-based activities focused on problem solving, consensus building, and interdependent group functioning not only promote active participation of each individual class member but can be constructed in such a way as to provide learners varying degrees of linguistic support" (Lee, 1999, p. 33).

Lee provides a four-criteria model for "recasting" typical discussion questions as task-based activities. The first of these criteria is identifying a desired informational outcome. Second, discussion topics should be broken down into manageable, sequenced subtopics. Finally, lexical and grammatical support should be built into each task. The employment of language tasks in learning and research is also in line with the tenets of sociocultural theory, which seeks to observe and explain learning in real time, during engagement in language-mediated cognitive activities.

Learner and Instructor Roles in the Task-based Classroom

"Instructional tasks, by nature, imply roles to be played on the part of learners and teachers" (Meskill, 1999, p. 156). The notion of communicative language teaching and learning within a task-based environment assumes that learners are active in the co-construction of meaning with other learners and/or the instructor. Task-based instruction represents a move to a learner-centered approach to L2 teaching, in which learners are empowered to take on primary responsibility for their language learning. Teachers surrender to learners some control of classroom talk, providing learners with opportunities to share differing perspectives and opinions, to disagree and resolve disagreements, and to build a consensus if possible (Meskill, 1999, p. 147). Meskill describes such a classroom situation as moving "towards a community of learners" (Meskill, 1999, p. 155).

Summary

This section has shown the importance of the concept of task within current communicative language teaching approaches. Task-based language instruction is in accordance with a sociocultural view of SLA, which analyzes learner language development as it takes place during engagement in cognitive tasks. Task-based language learning also lends itself to research into CALL usage, as the computer provides an arena for task-based learning involving either individual learners or groups of learners. For this reason, the current research project will implement a task-based design.

Emergent Grammar

In mainstream approaches to SLA, the L2 learner's developing grammatical system is often referred to as her or his *interlanguage*. Interlanguage is viewed as a system that develops as the learner imposes structure on available linguistic data (Gass & Selinker, 1994, p. 11). An essential quality of this system is that it usually reaches a plateau in which development is significantly slowed down or ceased. This plateau is referred to as *fossilization*. "In SLA, one often notes that interlanguage plateaus are far from the TL [target language] norms. Furthermore, it appears to be the case that fossilized or stabilized interlanguages exist *no matter what* learners do in terms of further exposure to the TL" (Gass & Selinker, 1994).

Recently, however, the implications of such terms as "interlanguage", "native speaker" and "non-native speaker" in the mainstream literature have been called into question by some SLA theorists (Firth & Wagner, 1997). Firth and Wagner take particular issue with these concepts, claiming that interlanguage is often viewed as defective communication, compared to that of the native speaker's linguistic system. Further, native and non-native speakers are treated as if they were homogeneous groups. Firth and Wagner propose that the SLA research base be reconceptualized and broadened to "allow authors to explicate the competencies through which the participants conjointly accomplish meaningful communication within the resources — however seemingly imperfect — at their disposal (Firth & Wagner, 1997, p. 290). These theorists believe that such a reconceptualization will allow researchers to better "understand and explicate how language is used *as it is being acquired through interaction*, and used resourcefully, contingently, and contextually" (Firth & Wagner, 1997, p. 296).

Related to the concept of "perfect" or "imperfect" acquisition of grammar is the idea that grammar is a closed, fixed set of rules waiting for acquisition. A recent alternate view to this a priori view of language as a closed fixed code linking preexisting forms to preexisting meanings is known as *emergent grammar* (Hopper, 1998). According to Hopper, grammar is one of a series of repetitions in language, along with lexical and idiomatic repetitions. As such, grammar is not a single delimited system, but rather an open-ended collection of forms that are perpetually restructured and resemanticized during actual use (Hopper, 1998, p. 159). Hopper cites as support for the emergent grammar view the fact that in actual practice, language is much less grammatical than theoretical syntacticians would suggest. In fact, corpus linguistics, in which computers have made possible the large-scale study of patterns of usage, has also led some linguists to question the assumption of large-scale regularity in language (Hopper, 1998, p. 159). The issue underlying the EG perspective versus a rule-governed perspective to grammar is whether L2 morphosyntactic abilities should be understood in terms of associative memory processes, or whether it is necessary to postulate rule-based symbol processing systems to account for grammatical skills (Ellis & Schmidt, 1997).

The EG view of mental grammar has several implications for SLA theory and practice. First, since learner grammar is a highly fragmented entity, communication among L2 learners is very much a question of negotiating mutual understanding. Sometimes such negotiation involves morphosyntax, i.e., correct grammatical form, but often the negotiation does not involve form, but rather informational content. Second, in the EG view, language has its source in each individual's life history and experiences and in the endeavor to accomplish successful communication. As such, language is not a general abstract possession that is uniform across the linguistic community. This is especially true in a community of L2 learners. In order to see structures as emergent, however, it is necessary to examine language in its naturally occurring context, in other words, to see what learners *do* do in a natural environment rather than what they *can* do in a laboratory condition (Hopper, 1998, p. 165). The social context is therefore of utmost importance in the EG view: "In EG, because the forms of a language do not exist hermetically sealed in the mind of the individual speaker, but are instead distributed during acts of communication among speakers, signs reflect a constant competition among speakers for the control of meaning..." (Hopper, 1998, p. 163). L2 grammatical development, then, is constructed as learners build a repertoire of strategies for building discourses. Viewed in this way, grammar is not the *source* of regularity, but rather the learner's construction of such regularity during collaborative discourse. This view is consonant with the post-Vygotskyan paradigm of SLA theory and research, and will therefore be invoked in this study.

Computer-Assisted Language Learning - Description and History

The following account of the history of CALL will serve to orient the reader to the use of computers in teaching foreign languages. CALL encompasses a wide range of language teaching and learning issues beyond those related to synchronous CMC, but it is from this branch of research that CMC originated. It will therefore serve the reader to have a well-versed background in CALL issues.

Introduction to CALL

The CALL research tradition is highly interdisciplinary in nature, drawing on the fields of applied linguistics and foreign language teaching methodology, SLA, computer-assisted instruction, and instructional design (Levy, 1997). Since CALL investigates the role of computers in language learning, and SLA investigates the cognitive processes involving in language learning, CALL research can be considered to be a subset of SLA research. That is, the computer-mediated environment is one of many environments in which to research the learning of second/foreign languages. SLA is a multifaceted area of academic inquiry. At least forty distinct theories or perspectives on SLA can be found in the scholarly literature (Larsen-Freeman & Long, 1991). Likewise, CALL research is multifaceted. Levy informs us that CALL does not represent one homogeneous type of activity that can be described in terms of a stable, invariant framework relating computer, learner and task (Levy, 1997).

To understand the present state of CALL research, it is helpful to take a brief look at its past. The history of CALL goes back at least as far as the history of the use of the computer (see Levy, 1997, for a thorough review). As Hawisher (1994) notes, the integration of technology in classrooms over the last 20 years has mirrored the current technological developments available, and more importantly, theories of learning and instruction that have evolved from the scholarly literature (Hawisher, 1994). The recent introduction of networked technologies in education coincided with a shift in interest in cognitive and developmental theories of learning to a social and collaborative view of learning (Hawisher, 1994). Levy (1997) points out that the use of CALL has evolved basically along the same lines as successive theories of SLA, from behaviorism to communicative language teaching. In the days of audiolingualism the computer mainly provided mechanical drills. In accordance with current communicative methodologies, the computer is now called upon to provide learners with opportunities for interaction.

CALL and Audiolingualism

From the late 1950s until the early 1970s, second/foreign language teaching in the United States followed a methodology known as the "audiolingual method", with its roots in the habit-forming tenets of behavioristic psychology. When computers entered the picture during this time period, they were viewed as an additional forum, beyond that of the classroom, for providing learners with mechanical language drills. In the current era of SLA theory and classroom practice, however, there is much more emphasis on communicative use of the target language, rather than mechanical practice. The use of computers in language learning has mirrored both the evolution of computer technology and the evolving theories of SLA, thus computers are now expected to provide learners with communicative environments just as second/foreign language classrooms do. Whereas the computer as drill instructor does not make use of technology in any unique way, the computer as provider of communicative contexts does have the potential to deliver language instruction in ways that both complement and go beyond classroom-delivered instruction.

CALL and Communicative Language Teaching

The CALL advantage: language context. In treating language teaching and learning as communication (rather than rote memorization of grammar rules), the notion of context becomes an important factor in language instruction. Frommer makes a convincing case that "context makes an essential contribution to cognition and that the computer provides more of a context for the foreign language than was previously possible" (Frommer, 1998 p. 199). Frommer goes on to explain that one can analyze context in classroom language learning in up to at least six levels: 1) the lexical-semantic context in which words are presented; 2) the context of discourse; 3) the cultural context of an utterance or text, with regard to the target culture; 4) each students' personal context — personality and background — which determines his or her reactions and relationship to the material and the classroom situation; 5) the expectations that both students and teachers have for the learning context; and 6) the classroom atmosphere (Frommer, 1998). Relating these levels of context to CALL, Frommer claims that today's computer and especially multimedia technology offer a way of learning that corresponds to cognition — a way that was not previously possible. Specifically, the computer adds three dimensions to the learning environment that did not exist previously, or only existed in exceptional cases: 1) exposing students to larger quantities of text, images and authentic materials; 2) increasing time on task in an efficient way; and 3) allowing students to assume responsibility for their own learning. Additionally, multimedia technology delivers instruction that is multisensory, displaying text and projecting digitized sounds and images simultaneously to link meaning to form. These multimedia resources can serve to individualize learning (Garrett, 1995). Finally, the computer's ability to record, tabulate and organize data on the learning history of each learner goes well beyond the capacity of a human being, making the computer a very efficient tool for diagnosing individual learning difficulties (Garrett, 1995).

CALL and the proficiency movement: the four skills and testing. The proficiency movement (Omaggio Hadley, 1993) of the 1980s had a great impact on foreign language teaching methodology, as it provided an organizing principle around which to implement communicative language teaching, as well as a common yardstick with which to measure language skills. Although speaking was the most emphasized skill in this movement, there were also implications made for developing the skills of listening, reading and writing, and cultural competence. Although the four skills are at times focused on individually in instruction and/or research, the proficiency movement advocates integrating these skills so that they may support each other as the learner experiences language growth. In a review of empirical CALL studies published in academic journals from 1990-1994, Basena and Jamieson report that of the 67 studies they located (not including studies published in edited books), 34% of them specifically investigated the writing skill and 15% investigated the reading skill. Only one study investigated listening and few studies looked at all skills in general (Basena & Jamieson, 1996). In two recently edited volumes, Bush (1997) and Pennington (1996) both include chapters dedicated to the discrete skills of listening, reading, speaking and writing, in addition to cultural competence.

In addition to CALL use in instruction of the four skills, there is also a growing body of literature that treats computer-administered L2 testing. The rationale is that if L2 instruction is administered by means of CALL, then testing should reflect the same instructional practices. Dunkel (1999) reports that computerized language testing is becoming more popular as commercial software is made increasingly available to language programs. Computer-administered testing is reported to be adaptive, efficient and economical. For example, some types of computer tests can adapt the difficulty of questions to the learner's answers. For example, if the learner gives an incorrect answer, the computer responds with an easier question. If the learner gives a correct answer, the computer provides a harder question (Dunkel, 1999). The economy of such computer-adaptive tests is brought about by a stop ratio which determines when enough information has been gathered about a learner's performance to be able to assess the performance. In general, the application of CALL to proficiency-oriented instruction and testing has been an active area of research.

CALL and Interactionist SLA Theory

The predominant view of SLA is the interactionist perspective, originating from Krashen's input hypothesis (stating that comprehensible input is necessary *and sufficient* for acquisition, much like a child learns her L1) (Krashen, 1981) and elaborated by Long's interaction hypothesis (Long, 1981 and elsewhere) . As the interactionist paradigm is currently the prevalent framework for much SLA research, this is also the case for CALL research. Chapelle, who has written extensively on CALL topics, suggests that the interactionist perspective may be the most relevant to CALL research, because this perspective has generated important hypotheses about ideal conditions for SLA (Chapelle, 1998). Based on theory and empirical research findings from the interactionist perspective, Chapelle puts forth seven hypotheses relevant for developing multimedia CALL: (1) the linguistic characteristics of target language input need to be made salient, (2) learners should receive help in comprehending semantic and syntactic aspects of linguistic input, (3) learners need to have opportunities to produce target language output, (4) learners need to notice errors in their own output, (5) learners need to correct their linguistic output, (6) learners need to engage in target language interaction whose structure can be modified for negotiation of meaning, (7) learners should engage in L2 tasks designed to maximize opportunities for good interaction. In short, Chapelle suggests that effective CALL programs are those that implement the hypotheses of the interactionist perspective into their design.

Today's multimedia technology is considerably capable of delivering opportunities for communicative interaction. A popular interactive videodisc program for French called "A la recontre de Phillippe" (*In search of Phillip*), for example, immerses learners in an ongoing sopa opera-type story in which the plot winds out in variable ways, depending on how learners answer questions that are posed to them as the story unfolds. Similarly, a Spanish language CD-ROM program called "Nuevos Destinos" (*New Destinies*) places learners in the role of an attorney's office assistant, with opportunities to answer phone calls, read background documents relating to legal cases, and send faxes and e-mail. In each lesson the office assistant reports to a new work day and the attorney tells her or him what needs to be done that day. Although these programs succeed in providing learners with opportunities for interaction, they still fall short in one important area: to have actual negotiation of meaning involves parsing syntactic structures, an ability that is still less than easily accomplished by computers in their current state of technological advancement.

Currently, there is a distinction in the SLA literature between "mind" or cognitive theories, which focus on the internal psycholinguistic mechanisms of the learner (such as input processing), and social models. Social models focus more on the role of the social context than on the mind-internal aspects of language development, in order to observe how the social environment shapes the mind. While cognitive models are currently prevalent in SLA theory and research, social models such as sociocultural theory are gaining prominence in the literature. As Hoven recently stated, "Research energy is turning away from mental phenomenon towards social phenomenon models" (Hoven, 1999, p. 90). Sociocultural theory is gradually working its way into CALL research, proving to be a robust framework for describing and explaining SLA phenomena within the computer-mediated environment.

CALL and Vygotskian Sociocultural Theory

In Vygotskian sociocultural theory L2 learning is viewed as occurring discursively within social interaction. While the importance of interaction is undisputed in mainstream SLA theories, sociocultural theory places particular emphasis on the features of social interaction that promote language learning, rather than on the mind-internal mechanisms. Whereas the computer is important to the interactionist in terms of the opportunities it can provide for provision of input, interaction and negotiation of meaning, to the sociocultural theorist the theoretical import of the computer in SLA is the role the computer can play in promoting the type of social interaction that promotes SLA. More concretely, the computer's ability to establish a zone of proximal development (ZPD) for learners, to scaffold learners appropriately, and to engage learners in cognitive activities that are carried out by means of language, are of primary interest to sociocultural theory. Current multimedia technology in itself is hard-pressed in its ability to provide language instruction in sociocultural terms. The main reason for this is that sociocultural theory, as its name indicates, is a theory of *social* learning, and as advanced as computer technology is today, computers still cannot function as interlocutors in conversation as human beings can. Constructs such as the ZPD and scaffolding, for example, can be difficult to satisfy by means of a multimedia computer program, as the dynamics of determining a learner's ZPD and of providing appropriate scaffolding are largely a function of ongoing discourse with the learner. Although sociocultural theory does not deny that some type of learning can occur non-interactively, one cannot always predetermine a particular learner's ZPD and the exact type of scaffolding that the learner will need to carry out given language tasks. The best that a multimedia program can do is to make available a large amount of language assistance to the learner, which the learner would make use of as needed. One recent study on listening and viewing comprehension does just this:

> In the model proposed here, the framework for the allocation of control to learners is provided in the software by presenting the available language learning resources in a manner that is easy for them to navigate, while at the same time providing the information necessary for the learners to make informed decisions about their learning path (Hoven, 1999, p. 89).

Although it is possible for experienced teachers and courseware designers to anticipate many of the types of scaffolding that learners may require, the notion of a computer taking the place of a human being in social interaction is still far-fetched. At their present stage of development, computers are still unable to interact with humans in such a way that a learner's ZPD can be activated and determined, and that learner-specific scaffolding can be provided in real time.

There are at least two potential areas, however, in which the marriage of CALL and sociocultural research can be robust. The first of these areas is an analysis of learners' interaction with *each other* as they work collaboratively on some type of computer-based activity. In viewing the computer as a learning tool, it can be equally productive to analyze learner interaction during a computer-mediated task as it can be to analyze learner-computer interactions. To do such a learner-learner analysis would be completely within the realm of sociocultural theory, and would provide interesting insights into the social nature of learning that can be brought about by computers. The second research area, which is gaining popularity in the literature, is CMC. In CMC, the computer provides a communicative context, but does not engage in the communication itself. Rather, the computer users are engaged in discourse with each other, a context which lends itself to sociocultural analysis of discourse features that promote language growth. The current state of the recently-initiated CMC research domain will be further detailed later in this overview.

Summary of CALL and SLA Research Paradigms

In summary of CALL with current SLA research paradigms, it can be said that since its inception, CALL research has mirrored research in prevalent SLA theories. CALL activities in SLA research have been utilized in a way that is parallel to other types of experimental classroom tasks. In this way, CALL research has functioned as a theory-building agent: "We should use technology to explore theories about how students learn a foreign language" (Muyskens, 1998). In classroom practice, CALL programs are typically designed according to the theoretical beliefs of the designers or classroom teachers. As the interactionist perspective has been the predominant SLA paradigm for a number of years, there is abundant CALL usage and research within this paradigm. As social theories such as Vygotskian sociocultural theory gain prominence in the SLA literature, more CALL studies will be framed within these theories as well.

The Interrelation Between Theory and CALL Development

Many scholars support the position that SLA theory should drive CALL development (Chapelle, 1997; Liou, 1994). Liou (1994), cited in Levy (1997), states that: "Well-grounded theoretical motivation for technological innovations should always lead CALL courseware development" (Levy, 1997, p. 41). Given the quantity of theories available, scholars often enter into debate over which theory is most appropriately applied to the CALL context (Chapelle, 1999; Salaberry, 1999). In addition to SLA theory, theories of formal linguistics and of cognitive psychology are sometimes points of departure for CALL development (Levy, 1997). Levy points out that while there is much to be said for theory-driven CALL, the reality of CALL development is that a number of projects are not born of formal theory as such, but rather of practical issues of language teaching (Levy, 1997). To understand the various levels at which CALL development may begin, it is useful to refer to Richards and Rogers' model of language learning, which consists of the three levels of *approach, design* and *procedure* (Richards & Rogers, 1986, cited in Levy, 1997, p. 85). The approach level corresponds to theories about the nature of language and language learning. The design level puts forth the objectives of the method, a syllabus model, types of learning and teaching activities and the roles of the learner, the teacher and the materials. Finally, the level of procedure describes actual classroom implementation. Levy (1997) reports that CALL design occurs at all three of the Richards & Rogers levels. It is important to note, as Richards & Rogers themselves do, that methodological development does not necessarily proceed from approach to design to procedure; the process can begin at any of these levels (Richards & Rogers, 1986; cited in Levy, 1997, p. 29). Levy argues that the same might be said for CALL, and further, that to insist that all CALL must be theory-driven would place unnecessary restrictions on CALL development (Levy, 1997, p.51). Levy cautions that CALL scholars and practitioners may not be speaking the same language because while scholars often solve problems by formulating theory (formalists), practitioners often solve problems by writing programs (proceduralists). This can lead to danger for formalists if they are not careful that their theories really do encompass the context of CALL. Likewise, proceduralists face the danger of being led purely by what the technology can do, possibly to the point that there is no theoretical basis for their work (Levy, 1997, p. 54).

In summary of the interrelation between theory and CALL development, it can be seen that the current state of affairs in CALL research and practice in many ways reflects the overall state of SLA research. That is, there is a plethora of theories, and a diverse range of beliefs concerning the relationship of theory to practice. Chances are that the situation will remain this way for some time to come, as developments in technology will doubtlessly continue to fuel CALL research and practice in increasingly powerful ways, and developments in the interdisciplinary field of SLA theory will likely continue in divergent directions. What is important to recognize is that multiple theories of SLA generate a diversity of important research findings into the nature of L2 learning. For this reason, theory and practice should at least attempt to relate to one another.

The Present State of CALL and its Limitations

To close this review of the state of CALL research and practice, it is necessary to mention the limitations of CALL use and research in its current form. First, Chapelle (1996) points out as a research concern that there remains a need to assess the *outcomes* of CALL use: "Ultimately, a crucial question for researchers is whether or not learners' interaction with CALL programs is related to subsequent ability in the target language" (Chapelle, 1996, p. 147). This is also an area of difficulty in mainstream SLA research, as SLA is a complex, multifaceted, and at the same time relatively little understood process, that to trace ability in a L2 to its original learning source is at best very difficult. Another research limitation that is also held in common with both mainstream studies in SLA and in CALL, is pointed out by Garrett:

> There are so many uncontrollable variables that evaluating the efficacy of technology across the board is impossible. It is possible to evaluate the pedagogical efficiency of specific features of ICALL for specific learners in specific language learning tasks, but even in carefully delimited studies there is the danger of interpretations based on some of the problematic assumptions I have been detailing (Garrett, 1995).

Regarding technological limitations, computers are still less than sufficiently capable of processing and responding to syntax in a human-like way, both in written and oral forms. Although there are translation programs in existence that can render sentence-level utterances from one language into another, this technology is still less than satisfactory, due to the multiplicity of contextual constraints on meaning. These programs have been successful in limited contexts such as technical translation, which is quite literal and makes little use of idioms, but their use breaks down in other natural language contexts. In language learning exercises, for example, computers are not able to parse learner syntax to the point that they can provide feedback of the same type that a human being can provide. Thus, any exercises that are not multiple choice or true-false or short answer with a small range of possible answers, must be corrected by a human being. Regarding voice recognition, computers are able to recognize limited oral syntax and respond to it, but still only in a mechanical way that does not resemble human communication. As Terry put it, "The small amount of research on the issue generally finds that CALL programs on their own are insufficient to promote rich oral interaction (James, 1996). In the above-mentioned interactive videodisc and CD-ROM programs, for example, the computer responses to learner input are programmed ahead of time, so that if the learner says something that was not anticipated by the programmer, the program will not function properly. This is the reason that there are so few studies of CALL and the speaking skill, unlike the skills of listening, reading and writing.

Finally, there are a few practical limitations to CALL use. The most obvious of these is an economical limitation. Technology is costly, and college administrations must be convinced of the worth of technological innovations before they are willing to invest the capital necessary to implement technology into their programs. Also, some teachers are skeptical of the use of technology, for various reasons, ranging from an unwillingness to let go of the traditional ways of carrying out their jobs to a lack of conviction concerning the capability of technology to enhance language learning, to a fear that technology will strip them of their jobs. These factors may be part of the reason why in a 1995 survey of the use of instructional technology in twelve academic areas, it was reported that 59% of foreign language programs and 65% of ESL programs used no form of computer technology in their courses, placing foreign languages at the bottom of the list of academic areas surveyed (Warschauer & Kern, 2000). Nevertheless, computers continue to play increasingly important roles in society and especially in education. The same will most likely be the case for L2 instruction in the future. Ray Clifford, Provost of the Defense Language Institute is widely quoted as saying that although computers will not replace teachers, teachers who use computers well will replace those who do not (Garrett, 1995).

Synchronous CMC: Description and History

In his review of theory and research on CALL, Levy (1997) observes that the literature divides the role of the computer into two general categories. The first of these is the computer as tutor. In the capacity of tutor, the computer fulfills much the same role as a classroom teacher or other source of information, such as print, audio and video material. The computer provides information to the learner and in some cases provides exercises and/or tests to measure learning of the provided material. A second type of computer-mediated learning employs the computer as a tool, or an instrument that facilitates the accomplishment of some process. Examples of the computer employed as a tool are word processing programs, databases and spreadsheets, and CMC environments. In the case of CMC, the computer provides an environment for human communication. It is important to note that although the computer mediates the communication, both the origin and the elaboration of the communication are products of the human beings who sit at the computer. As such, CMC is a tool that human beings may employ toward communication with each other. Within CMC there is a distinction between *synchronous* and *asynchronous* communication. Synchronous communication occurs live, or in real time. In other words the communication is immediate. Examples of synchronous CMC include chat rooms, in which individuals type messages and view the ongoing exchange of messages on their computer screen, and environments in which interlocutors actually see and hear each other (such as CU see me technology). Asynchronous CMC does not occur in real time. Examples of asynchronous CMC are bulletin boards and mailing lists, in which individuals post messages and respond to posted messages, and electronic mail. Viewing CMC as a communication tool is conducive to a sociocultural analysis of the use of the tool for language learning, an important goal of the current study.

Research Findings on CMC

This brief literature review on CMC will focus on the synchronous mode of CMC use and research, which is sometimes referred to in the literature as *CACD* -- computer assisted classroom discussion.[2] Ortega (1997) pointed out the fundamental research issue in computer-assisted classroom discussion: "In the case of L2 classrooms in which CACD has started to be used, the crucial question from an SLA perspective is in what specific ways CACD may or may not be relevant to the processes involved in L2 learning (Ortega, 1997).

Synchronous electronic communication is unique in that it possesses a combination of features of both speech and writing. As Warschauer put it: "The historical divide between speech and writing has been overcome with the interactional and reflective aspects of language merged into a single medium (Warschauer, 1999, p. 6). Synchronous electronic communication is realized by means of typing keyboard messages into the computer, which is a form of writing. But at the same time, the writing is interactional in a real-time sense, as is oral communication. Thus, when individuals participate in synchronous electronic communication, they are communicating in real-time, but by reading and writing instead of speaking and listening. As such, it is interesting from both theoretical and practical standpoints, to research the unique qualities of synchronous electronic communication, and the possible effects that such qualities may have on L2 learning.

The use of synchronous CMC in language classes originated in the mid-1980s in the English department at Gallaudet University in Washington, DC, for the purpose of helping deaf people to communicate in English rather than American sign language (Beauvois, 1997). The idea of electronic networks for interaction (ENFIs) then extended into English composition classes (Bruce, Kreeft Peyton, & Batson, 1993). At the University of Texas, Austin, a program called Daedalus Interchange, which included opportunities for synchronous discussion, was designed for (L1) writing classes (see

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[2] So as not to confuse the reader, the "CMC" acronym will be used consistently throughout this dissertation, unless "CACD" appears in a citation.

Kemp, 1993, for full description) . Kelm (1992) was probably the first to use a program such as Interchange for second/foreign language classes. Having used Interchange with intermediate learners of Portuguese over a thirteen-week period, Kelm reports several benefits derived from synchronous CMC. Namely, CMC: increased participation from all members of a work group (as opposed to face-to-face conversation), allowed students to speak without interruption, reduced anxiety which is frequently present in oral conversation, rendered honest and candid expression of emotion, provided personalized identification of target language errors and created substantial interlanguage communication among L2 learners. Similarly, Chun (1994) reported that her first-year learners of German performed a wide range of interactional speech acts in synchronous CMC: they asked more questions of fellow students as well as (occasionally) of the teacher, they gave feedback to others and requested clarification when they did not understand someone else, and they ended conversations with appropriate leave-taking utterances. Results derived from CMC research such as the abovementioned studies seem to suggest that language competence demonstrated by learners in CMC may be transferable to both spoken discourse and writing (Chun, 1994).

Following the Kelms and Beauvois studies, other researchers report advantageous qualities of CMC among L2 learners, as compared to face-to-face conversation. Warschauer refers to the ability of CMC to help overcome the contradiction between focus on form and meaning (Warschauer, 1999). In CMC learners have more opportunity than they do in oral discussion to notice structures in incoming messages, which is believed to be critical for learning (Schmidt, 1993). Also, learners can consult previous text in the conversation, a dictionary, or another learner as they write their messages. Kern (1995) also provides empirical evidence of increased language production among two groups of learners of French, as well as a greater level of morphosyntactic sophistication, a wider variety of discourse functions, and reduction of anxiety, as compared to face-to-face discussion of the same topics. Similarly, Warschauer (1996, 1999) found increased language production among (ESL) learners; increased equality among participants, especially women, minorities and the shy; as well as production of more lexically and syntactically complex language (as compared to face-to-face discussion), and reduced stress. Both the Kern and Warschauer studies were conducted during one chat session.

As many researchers have noted increased equality among CMC participants, it is important to note that this issue has implications for teacher/learner roles in CMC. As all participants have equal opportunity to enter their comments into the discussion, the role of the teacher in CMC is often decentralized. Chun (1994) considers such equalization to be a benefit to learners in that it turns over to them a larger proportion of the discussion and provides learners with more autonomy to communicate their ideas in the L2. Kern (1995) mentioned this same issue as a possible drawback for teachers who find it difficult to relinquish control. Scholars of SLA such as Lee and VanPatten (1995) and Lee (1999), however, suggest that learners may benefit if they are given more communicative autonomy. Teacher/learner roles are an important part of the overall learning context, and for this reason it is expected that the current study, with its emphasis on the social context of computer-mediated communication, will shed light on this issue.

Whereas the previously mentioned CMC studies were not overtly cast within a specific SLA theoretical framework, Blake has conducted some studies within the interactionist SLA paradigm (Blake, 1999). Blake set up a variety of communicative tasks for his dyads of Spanish learners to carry out in a chat room environment: two one-way info-gap activities, one two-way info-gap activity, a decision-making activity and two jigsaw activities. Blake's findings were that the jigsaw tasks accounted for 93% and 78% of the total negotiations, respectively; that negotiation triggers within those tasks were mostly lexical (75% and 95%); and that most negotiation events followed Varonis and Gass' negotiation schema of trigger, indicator, response, reaction (Varonis & Gass, 1985). An important implication of Blake's research is that task types in chat rooms, just as in face-to-face the classroom communication, have a crucial effect on the type of communication produced by learners; a point that deserves further empirical research.

The Present State of the Use of Chat Rooms Within CALL Research.

Whereas CALL has traditionally consisted of programmed applications such as tutorials, drills, simulations, instructional games and tests, CMC, also referred to in the literature as computer-assisted class discussion (CACD) or network-based language teaching (NBLT) represents a new and different use of CALL, centered around human-to-human communication in an Internet-based environment (Warschauer & Kern, 2000). As CMC is a very recent field of enquiry, there is to date a small but growing body of published research on the relationship between the use of computer networks and language learning.

Synchronous CMC occurs in environments commonly referred to as "chat rooms", because the computer interface resembles a confined area in which interlocutors gather to exchange messages instantaneously, as if they were sitting in a room together and talking. Foreign language students and teachers currently have several types of chat room environments available to them. There are web sites called "MOOs" (Multiple user domains Object Oriented) designed for foreign language learners, such as "Mundohispano", a Spanish-language community to which learners gain access by requesting a user name, which becomes their identity within the community. At any given time there are language learners and/or native speakers in the chat room, who typically chat about whatever topics interest them (see Kern, 1998, for a detailed review). Another type of chat environment is that of web-based course deliver applications such as *Daedalus Interchange*, *WebCT*, or *CourseInfo*, which provide online organization of an entire course, from the syllabus to reading assignments, to online assignments and quizzes and student-tracking information for instructors. The chat feature in these programs are secure and can only be accessed by an instructor-assigned user identification. These chat environments are thus tightly controlled and can be implemented into the specific objectives of the given course.

Most of the few published studies on synchronous CMC have focused on easily quantifiable aspects of chat room communication (Warschauer & Kern, 2000). A few studies (Kern, 1995; Warschauer, 1996) have quantitatively compared amount of participation in face-to-face and computer-mediated discussion, finding more equalized participation among students and between students and teacher in the computer mode. Other studies have quantified the language functions used in chat room communication, demonstrating that learners use a variety of functions in chat rooms (Chun, 1994; Warschauer, 1996). Researchers have also quantitatively examined the linguistic features of chat room conversation, reporting more lexically and syntactically complex language use than in face-to-face interaction (Warschauer, 1996).

What stands out in all of the literature on chat rooms in L2 classes is that communication within them tends to be very cohesive and learner-controlled. It is widely held that engaging learners in extensive, meaningful discourse is an optimal condition for acquisition. When the teacher relinquishes control in the chat room and learners co-construct meaning with each other, an interesting learning environment evolves, a process which Meskill calls "towards a community of learners" (Meskill, 1999, p. 156). Building a community of learners is viewed as an optimal condition for learning, for social constructivist frameworks such as Vygotskian sociocultural theory. There is also a trend in foreign language education, and in education in general, toward "learner centeredness" (Nunan, 1988). In addition, when learners perceive themselves as belonging to a community, their affect and motivation is enhanced, which is also a positive condition for learning. Meunier conducted a study on CMC among third-year French and German students, in which she looked at various personality factors, such as motivation and learning styles, drawn form the mainstream SLA literature (Meunier, 1998). In general terms, she reported that in her study synchronous CMC triggered a high level of situational and task motivation as well as a positive attitude among foreign language students regardless of initial motivations and computer background. She attributed this to eight factors: 1) students realize that they can be understood and that they can sustain a discussion; 2) they are interested in their peers' ideas and thrilled by the authenticity of their exchanges; 3) they are in control of the discussion while participating at their own pace and without the pressure of other students waiting for an answer to be completed; 4) they find it attractive to write casually as if passing notes in class; 5) CMC holds interest and concentration time; 6) CMC encourages participation from students who do not usually speak in class; 7) CMC enhances both computer literacy and foreign language use; and most importantly 8) CMC contributes to a better atmosphere in class ("community building in Meskill's terms). Meunier derived three pages worth of pedagogical recommendations from the results of her study.

As with all use of technology in education, CMC is not without its skeptics and criticisms. Firs, an obvious question is, why hold a group discussion in writing, when you can hold the discussion face-to-face? Kern proposes several answers to this question (Kern, 1998). His first point is that synchronous CMC is not meant to replace talk but rather to supplement it with discussion that is "governed by a different set of conventions and constraints in order to open up new possibilities for an alternative, or even oppositional, discussion. Synchronous CMC, according to Kern, offers participants the possibility to voice their thoughts at will without interrupting other participants' thoughts or expression. Also, since synchronous CMC is written, participants may scroll back at any time to look at previous conversation, which gives the conversation a multilinear nature, and may even make the conversation richer. Learners may also take advantage of the scroll feature to look at the form of their own writing and make note of any errors they might have made in their production. Another source of skepticism is the often-held belief that learners will make more mistakes when they communicate with each other without the presence of a teacher. However, Kern reports that research on errors in learner-learner oral discourse has shown that error rates are no greater when learners interact with their same-level peers than when they interact with more competent speakers. It appears, then, that the empirically-based benefits of using synchronous CMC in L2 research and practice outweigh the perceived drawbacks.

Warschauer puts forth a very powerful rationale for building upon current research on CMC:

> These new technologies do not only serve the new teaching/learning paradigms, they also help shape the new paradigms. The very existence of networked computers creates possibilities for new kinds of communication. Because these new forms of

> communication are now so widespread, it is imperative that language students be exposed to them in the classroom. This is particularly important in English language teaching, since so much international online communication is conducted in that language, but it is likely to become increasingly important in the teaching of other languages as well, as cyberspace continues to become more multilingual. A pedagogy of networked computers must therefore take a broad view, not only examining the role of information technology in language learning, but also the role of language learning in the information technology society. If our goal is to help students enter into new authentic discourse communities, and if those discourse communities are increasingly located online, then it seems appropriate to incorporate online activities for their social utility as well as for their perceived particular pedagogical value (Warschauer & Kern, 2000).

In summary of the current state of synchronous CMC research, it can be said that CMC is still a very young field with relatively few, but very promising research findings. Further research on CMC should and most likely will follow several routes. First of all, unlike CALL research in general, there are to date no published studies on CMC which deal with interaction in interactionist SLA terms. From a psycholinguistic theoretical standpoint, the hybrid nature of chat room communication should be further analyzed in terms of mental processes involved in interactive reading and writing versus those involved in speaking and listening. Additionally, further study of sociocultural aspects of the use of CMC seem to be a natural research direction to take, given that CMC is by nature both a discursively-constructed environment and a potential learning tool. For this reason, further analysis of CMC framed within sociocultural theory should shed more light on social aspects of synchronous CMC and how such aspects may make online communication a viable tool to be employed in L2 classes.

Summary of What is Known and What is Unknown

Despite the growing number of studies on synchronous CMC, there remains much more to be uncovered about this modern mode of communication. Research has demonstrated advantages of synchronous CMC, such as equality of participation, increased and more complex language production, and reduction of anxiety. Most CMC studies in the SLA literature compare CMC communication to face-to-face communication. Many of these studies analyze a single 50-75 minute chat session. Current published research has not examined L2 learner use of synchronous CMC as a language learning mediator integrated into the social community of an intermediate Spanish classroom over the course of a semester. The research so far has focused primarily on what differentiates synchronous CMC from face-to-face discussion. What the scholarly literature has not provided thus far is a thorough investigation of the CMC medium in itself, particularly issues of how learners utilize the CMC medium as a mediator of language practice and learning over the course of a semester of study. The proposed research study seeks to fill this void in the literature.

Contributions This Study Will Make to the Literature

First, the findings of this research will be applicable to knowledge of new types of discourse in L2 classes. Most studies on synchronous CMC have been carried out without a specific theoretical framework, or within the interactionist framework. Most sociocultural theory research deals with face-to-face discourse. The current study will contribute to both the CMC and the sociocultural fields of knowledge by analyzing learner discourse in a CMC environment, within a sociocultural framework. Additionally, the study will have pedagogical implications on the use of CMC in L2 classrooms.

CHAPTER 3

METHODOLOGY

This chapter explains the research methods and procedures employed in the study. It will begin with a rationale and description of the qualitative methodologies chosen for the study, followed by a description of the research participants and context. Next, the research questions will be introduced, accompanied by their respective theoretical motivations. Specific research procedures will then be defined, including obtaining permission for the study and assuring participants' rights, and data collection procedures. Later, data analysis and data interpretation procedures will be outlined. Finally, a summary of the key elements of the research methodology will be provided at the end of the chapter.

Research Methodology

The research design of this study is that of a qualitative case study. Qualitative research is based on the collection and analysis of naturalistic data from a variety of sources. The primary instrument in qualitative research is the observer. Unlike quantitative research, in qualitative research there is no fixed method of data collection and analysis. In a qualitative study, the researcher searches for patterns in data and seeks to explain such patterns on the basis of the theoretical framework within which the study is conducted.

Johnson defines a case study in terms of its unit of analysis, the study of one case. "A case study researcher focuses attention on a single entity, usually as it exists in its naturally occurring environment" (Johnson, 1992, p. 75). Case studies, according to Johnson, can provide "rich information about an individual learner. They can inform us about processes and strategies that individual L2 learners use to communicate and learn, how their personalities, attitudes, and goals interact with the learning environment, and about the precise nature of their linguistic growth" (Johnson, 1992, p. 76). Possible units of analysis can be a teacher, a classroom, or communicative interaction in a particular situation. A researcher may choose to focus on an individual case or may study several cases and make comparisons among them. The number of cases should always be small, however, because the case study approach is designed to look at particular cases in a careful, holistic manner (Johnson, 1992, p. 76). Case studies always describe a case in its natural context. A case study researcher studies those elements of the environment that may shed light on the research question(s). Case studies often employ other types of qualitative research methodologies, such as ethnography and discourse analysis, and may stand alone or constitute part of a larger study employing additional approaches. The current case study draws on some elements of ethnographic research, and will employ discourse analysis as a principal research tool.

Ethnography is literally the description of culture (or of groups of people that are perceived as possessing some degree of cultural unity) (van Lier, 1988, p. 53). Originating in anthropological studies, ethnographic approaches are becoming increasingly common in educational research, due to the inability of experimental designs to take into account the social context of human behavior. A key principle that guides ethnographic research is the *emic* principle. The emic principle looks at phenomena through the lense of the participant, in the case of SLA research, the L2 learner (or teacher). "Critical knowledge of the classroom derives from the study of the meaning that participants create and develop in the social context of the classroom, as manifested through their interaction" (van Lier, 1988, p. 56). Ethnographic studies derive data from a number of sources such as transcriptions, questionnaires, interviews, lesson plans and notes, in order to achieve *triangulation*, or data analysis from a number of angles or points of view (Johnson, 1992, p. 90). In this study, the emic perspective was sought by means of learner and teacher questionnaires and follow-up interviews. Triangulation was brought in this study by analyzing data sources from multiple perspectives, as will be detailed later in this chapter.

In summary, the current study is anchored in the case study approach of the qualitative research paradigm, incorporating essential elements of ethnographic research, as well as discourse analysis.

Research Participants and Context

Knowledge of research participants and the research context is imperative in qualitative case studies. To that end, this section will provide the reader with some background information about the learners and the learning context, the chat sessions within the learning context, and the role of the researcher within the research context.

The Learners and Learning Context

The participants in this study were 33 learners[3] and the teacher in two intact fourth semester intermediate Spanish classes taught at the University of Pittsburgh. The original research plan was to use only one section, but the instructor's preference was to conduct the study in both of her assigned sections, in order to maintain consistency of instruction in both sections. The addition of the extra section provided a richer source of data to answer the research questions than a single class would have, while at the same time remaining congruous to the case study design of the research. The two sections involved in the study met for three contact hours per week. Two of the class meetings (Mondays and Wednesdays) were held in the classroom and the third meeting (Fridays) was held in a university computer laboratory, where the chat sessions took place.

The Intermediate Spanish curriculum at the University of Pittsburgh employs a content-driven, task-based approach to language teaching. Learners typically spend class time involved in interactive activities with specific communicative goals, as defined by Lee and VanPatten (1995). All beginning and intermediate Spanish classes at the University deliver integrated-skills (speaking, listening, reading, writing) language instruction. The integrated-skills nature of the course involved in this study lends itself to an analysis of communication that shares characteristics of both writing and speaking. The knowledge gained about chat room discourse during this research project may therefore be cautiously generalized[4] to foreign/second language classes that employ an integrated-skills approach.

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[3] This is the number of learners enrolled at the end of the semester. There were a few learners who dropped the course a few weeks into the study.

Chat Sessions Within the Learning Context

Pseudonym assignment. Prior to the beginning of the study, learners were asked to select a pseudonym for their chat room discussions. The reasons for this were threefold. First, previous research studies indicated that learners communicate in a more frank and forthcoming manner when using a pseudonym as compared to using their real names (Kern, 1995). Also, it was hypothesized that using the name of a Spanish-speaking person, learners might identify themselves more as Spanish speakers, which might enhance their chat room communication. Finally, pseudonyms afford anonymity to the learners in the research write-up. At the beginning of the study learners were asked to select a Spanish- language first and last name to use for the duration of the study. They were also instructed not to tell each other their names, in order to maintain anonymity.

Classroom logistics. To allow the researcher to observe the research context, the classes participating in the study held their chat sessions in a computer laboratory during 1 of their 3 weekly class meetings. The computer laboratory contained approximately 24 IBM-compatible networked personal computers arranged on top of tables forming several rows. Thus, learners sat beside each other and in front of and behind each other in this rather small, confined classroom-type environment. The learners in each class were divided into four groups, as the WebCT program[5] provided four separate chat rooms which could be accessed simultaneously. At the beginning of each chat session, the learners were given a handout containing the task instructions, at which time they were instructed to begin their respective chat sessions. As the learners and the instructor typed

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4. Due to the small sample size and descriptive nature of this study, a formal statistical analysis is not appropriate. Therefore, consumers of this research should make generalizations in a *cautious* manner.

5. Web CT is a web-based course delivery package used to provide online instruction. For more information about this package, see the company web site at http://www.webct.com.

their messages to each other, the text appeared on the computer screen in the order in which the interlocutors typed their comments on the keyboard.

The topics and tasks. The assigned topics were initially taken from the course textbook, ¿Qué te parece...? (Lee, Wolf, Young, & Chandler, 1996). After detecting reticence among the learners during the first three chat sessions, however, the instructor and the researcher solicited lists of suggested topics from the learners and implemented some of these topics in future chat sessions. The nine topics in the study were: la libertad (*freedom*), la censura (*censorship*), el sexismo (*sexism*), el cine (*movies*), la música (*music*), el matrimonio (*marriage*), escándalos de la familia (*family scandals*), los animales (*animals*), and el futuro (*the future*). All of the chat topics were introduced in prior class sessions and derived from authentic reading passages and/or video segments.

The weekly tasks (see Appendix F) were designed by the researcher in coordination with the course instructor, in order to meet both the research needs of the study and the instructional needs of the learners registered in the two sections. Thus, the chat sessions were tightly integrated into the overall classroom environment, in hopes that learners would approach the chat sessions as an important part of their intermediate Spanish program.

Of the 8 groups, 6 groups were assigned structured communicative tasks similar to the type called for by Lee and VanPatten (1995) and Lee (1999), which were the same types of tasks that learners worked with in the course textbook. The structured tasks consisted of three to five steps or subtasks, with grammatical support when appropriate. The other 2 groups were given an open-ended task. The open-ended task assigned the same topic as the structured task, but with very little control or guidance as to how learners were to conduct their discussions. The purpose of the alternate task assignment in 2 of the 4 groups was to obtain data for Research Question 2, regarding the effect of task on learner discourse in the chat room.

The instructor sat at her computer at the head of the computer laboratory, moving in and out of the four chat rooms, participating for a brief time in each of the conversations. As the researcher was present to assist with any technical problems, the instructor was able to spend the entire class time with the learners in the chat rooms.

The Role of the Researcher

Prior to the beginning of the study, the researcher met with the two classes involved in the study and explained the procedures to be carried out in the study. The researcher distributed participant consent forms and answered learner questions. The next contact that the researcher had with the learners was during the first chat session.

The researcher was present at all but 1 of the 9 chat sessions (session #3, October 15, 1999, in which the researcher was absent to attend a professional conference). Johnson (1992) informs that "[P]articipant observation means that the ethnographer both observes and participates in the cultural setting" (Johnson, 1992). The researcher in this study was thus both observer and participator. The researcher greeted the learners as they entered the computer lab, and distributed the topic and task sheet to them. In the first two sessions, the researcher spent a great deal of time helping learners troubleshoot computer difficulties, of which there were several. Indeed, instructors who decide to implement computer technologies into their curricula should be aware that computer difficulties are inevitable. For example, settings and preferences in Internet browsers must be checked to make sure that they are compatible with the web course delivery program (WebCT in this case). Also, some institutions maintain what is referred to as a "fire wall", which blocks access to web sites within the university, without special authorization. Additional technical problems that need to be dealt with are lack of computer skills in learners (although this problem is decreasing significantly as most college-age students by the present time have been exposed to computers during their entire lives).

As the learners and instructor became more proficient at working within the electronic environment, the researcher spent most of his time observing their behavior during the chat sessions, taking field notes, and at times answering learner questions about language use. The field notes generated ideas for subsequent questionnaire and interview questions. For example, the researcher observed learners consulting dictionaries, their textbook, verb charts, and each other during chat sessions. Having noted this pattern, the researcher sought more information about this behavior in the post-study learner questionnaire.

At the end of the study, the researcher met with the learners during a class period, to distribute the post-study questionnaire. In the time remaining after learners completed the questionnaire, the researcher talked briefly with some of them, asking for clarification or further elaboration of questionnaire responses. After the conclusion of the study, the researcher called some of the learners on the telephone to ask additional questions regarding the patterns that began to evolve in the learner perceptions data. The questionnaire and interview procedure was carried out in the same way with the instructor.

In summary of the role of the researcher in this study, he was mainly an observer of learner and instructor behavior during chat sessions, but to some extent was also a participator in the learning context. The researcher assisted learners and instructor with technical difficulties, and at times served as a language resource person to the learners.

Research Questions and Their Motivations

Case studies begin with a research question that comes directly from experience or from theory (Johnson, 1992, p. 92). The five research questions which motivate this study all have their origin in empirical SLA research and/or SLA theory. In many instances the case study researcher starts with specific research questions, but develops and refines the questions as the study progresses (Johnson, 1992, p. 92). The five research questions in this study evolved and became more specific during data analysis. This section will present the five research questions that drove the study, as well as the theoretical motivations of each question.

Research Question 1: What are the Interactional Features in Chat Among Learners and the Teacher?

The sociocultural SLA literature is replete with examples of interactional features in face-to-face conversation, which are claimed to facilitate L2 learning. The literature review above has shown the sociocultural constructs of regulation, mediation, scaffolding, zone of proximal development, and activity theory to be useful in describing and explaining L2 learning as it occurs online during social interaction between language learners and a more knowledgeable interlocutor (usually their teacher), or solely among language learners. The theoretical motivation of this research question, then, was to determine if interactional features involving some or all of the same constructs would also be present in CMC. Additionally, new interactional features specific to synchronous CMC were sought in the data.

Research Question 2: What Effects do Specific Communicative Tasks Have on Such Interactional Features?

The SLA literature on task-based instruction suggests that task-based communication is conducive to language learning, perhaps to a greater extent than non task-based instruction. Engaging learners in cognitive tasks mediated by language is also congruent with sociocultural theory, although not for the same reasons as those put forth by the interactionist approach. Given that synchronous CMC is a new medium of communication, it is both theoretically and pedagogically interesting to examine learner communication in both a task-based context and a non task-based context within synchronous CMC. It was anticipated that analysis of chat room transcripts in this study would provide insight into the nature of learner communication during involvement in a specific, structured task vis a vis communication within an open-ended task.

Research Question 3: How do Students Perceive the Use of Chat as a Language Learning Tool?

A fundamental tenet of the qualitative research tradition to which this study belongs, is that the emic, or participant, perspective should constitute an important part of the research. A researcher can make inferences from collected data such as chat room transcripts, but a first-hand knowledge of learner experiences can greatly enhance the analysis and interpretation of such data. Indeed, learners' perceptions of classroom events mediate the effect of teaching (Johnson, 1992, p. 40). Knowledge of learner perceptions of their own communicative behavior can help the SLA researcher to understand how learners understand, participate in, and learn from classroom events (Johnson, 1992, p. 42). For this reason, the collection, analysis and interpretation of learner perception data was one of the research objectives of this study.

Research Question 4: How Does the Teacher Perceive the Use of Chat as a Language Learning Tool?

Similar to the motivation for Research Question 3, data on instructor perceptions were a central component of the emic perspective in this research study. It was expected that first-hand knowledge of the instructor's beliefs about language learning in general and more specifically within the chat room environment, would assist the researcher in painting a more detailed picture of the synchronous CMC context of the classes involved in the study. It was believed that the instructor, as well as the learners, would identify aspects of the synchronous CMC environment that are beneficial to L2 learning, as well as some drawbacks to synchronous CMC.

Research Question 5: How Does Learner Output in the Chat Room Change Over Time?

It was expected that the language learners in this study would manifest changes in their language use throughout the nine-week period of the study. One would expect, for example, that as the learners gain more and more exposure to the Spanish language, their language abilities would grow in terms of acquisition of structures and lexical items. It was anticipated that there would be growth in learners' language abilities, which would be manifested in the usage of an increasing number of Spanish language structures (particularly verb tenses and moods; an integral part of the Spanish language), perhaps with increasing accuracy. The motivation of this research question, then, was to illustrate such changes as may have occurred in the data. It was believed that describing and explaining changes in output, when connected to conclusions drawn from the other four research questions, would provide a multifaceted view of the use of synchronous CMC in the classes in this study.

Research Procedures

The research procedures for exploring learner and teacher interaction in the chat room context included securing permission to conduct the research in Spanish classes at the University of Pittsburgh and describing the data collection procedures that were put into practice in the study. This section addresses all of these issues.

Permission and Participants' Rights

All research conducted at the University of Pittsburgh involving human participants, must be cleared through the university's Human Subject Review Board. In addition to completing these requirements, the researcher secured the permission of the instructor of the two Spanish 0004 sections, as well as that of the participants. All participants signed a participation consent form prior to the beginning of the study (see Appendix A).

Data Collection Procedures

As in most case studies and ethnographic research, the data collection procedures in the current study were varied. In order to produce an informative account of language learning phenomenon in situ, data triangulation, or data collection from a variety of sources, was necessary. According to Goetz and LeCompte (cited in Johnson, 1992, p. 90), triangulation prevents the researcher from relying on initial impressions, helps correct for observer biases, and enhances the development of valid constructs during the study. The current study made use of several types of qualitative data in order to portray a more complete account of synchronous CMC in its classroom context. Data collection consisted of a pre-study teacher interview, data collection during chat sessions, researcher's field notes, and learner and teacher questionnaires and interviews.

Pre-study teacher interview. Prior to beginning the study, the researcher interviewed the course instructor, to determine in advance what her overall goals were when she interacted with her learners, as well as what expectations she had for the use of synchronous CMC in her classes (see Appendix A). It was anticipated that several issues related to the teacher's philosophy of language teaching and learning would come into question during the course of the study. For example, as was mentioned in Kern (1995), teachers often find it disconcerting that they cannot control learner production in the chat room in the same way that they can in the classroom. The pre-study instructor interview was therefore useful in creating an understanding of the instructor's behaviors as the study unfolded.

Data collection during chat sessions. A major procedure of ethnographic work is the detailed analysis of recorded data, which often begins with transcription. The most essential form of data for Research Questions 1, 2 and 5, were the transcripts of chat room conversations among learners. The *WebCT* program has a built in ability to log and archive all chat sessions. The chat log keeps track of when users enter and leave the chat room, as well as everything users say in their conversations. At the end of each chat session, the researcher printed a hard copy of all chat transcripts and organized them chronologically for subsequent analysis.

Researcher's field notes. As an additional source of documentation, ethnographic researchers take notes while they are in the field. When researchers are not participators in the community being studied, they are usually free to make notes as they observe the participants in the study. Although the researcher in this study participated in the research environment when learners and the instructor needed assistance, there was also time to write field notes. The researcher noted learner and instructor behaviors during the chat sessions, which helped to generate ideas concerning the types of questions to be asked on learner and instructor questionnaires. The researcher also made field notes after reflecting upon observations.

Post-study learner and teacher questionnaires. Chat room transcripts provide physical evidence of the nature of classroom communication. Such data, however, lack an emic perspective and can therefore be ambiguous, misleading, or at best, incomplete. For example, certain interactional or linguistic phenomena may be interpreted from reading a transcript, but such interpretation could prove to be off mark upon obtaining the learners' perspective on the same data. Thus, questionnaires are often administered for the purpose of obtaining an emic perspective on observed phenomena. Upon completion of the study, the researcher administered a questionnaire to the learners and the teacher (Appendices C and D) to elicit information pertinent to Research Questions 3 and 4. The questionnaires were administered during class time, providing ample time for participants to fill out the questionnaires. As called for by qualitative research methodology, the researcher piloted the questionnaire (Johnson, 1992, p. 114; Nunan, 1992). Prior to the conclusion of the study, the researcher had his own Spanish section participate in two chat sessions during class time, and subsequently administered the questionnaire to them. Their answers appeared conclusive enough to determine that the questionnaire would be an adequate research tool to gather data for Research Question 3.

Post-study learner and teacher interviews. Although useful research instruments, questionnaires may be limited in the information that they elicit. For this reason, participant interviews were also employed as a research instrument in this study. Interviews may range from tightly controlled, in which everyone is asked the same questions in the same order, to semi-structured interviews with a question format that is somewhat flexible, to open-ended interviews with no specific format (Johnson, 1992, p. 87) . In order to obtain specific information but also to allow for additional insights on the part of the participants, this study employed semi-structured learner and teacher interviews. After reading the learner and teacher questionnaires, the researcher interviewed learners and the teacher to obtain additional information beyond that provided in the questionnaire. Thus, the interview questions were structured in that they derived directly from the questionnaires. On the other hand, the researcher allowed the informants to elaborate on each question in whatever ways the informants chose to do so. In that sense, the interviews were semi-structured. In order to promote data triangulation, an additional source of interview questions derived from the researchers' analyses of the chat room transcripts. At times it was difficult, for example, to determine the meaning or purpose of a learner's utterance in the transcripts. Whenever necessary, the researcher asked the learners what the meaning and/or purpose of the utterances were.

Existing information. The last source of data was the collection of existing information. Information about the teacher, the learners, the course, and the university's Intermediate Spanish curriculum were collected from the teacher, the learners and the university. This information was used to describe the context of instruction and provided pertinent background information to illuminate the research context.

Data Analysis

This section will detail the data analysis procedures employed in the study. For Research Questions 1 and 2, regarding interactional features and task, a discourse analysis of chat sessions was carried out. Data reduction, indexing and display procedures common to the qualitative research paradigm (Miles & Huberman, 1994) were implemented for all research questions. Questionnaire and interview analysis provided the means to answer Research Questions 3 and 4, concerning learner and teacher perceptions. Finally, the measurement systems will be explained for Research Question 5, regarding changes in learner output.

Discourse Analysis

To shed light on the nature of chat room communication, discourse analysis was the principal approach to data analysis in Research Questions 1 and 2. Having grown out of work in various disciplines such as linguistics, semiotics, psychology and anthropology, discourse analysis is concerned with the study of the relationship between language and the contexts in which it is used (McCarthy, 1991, p. 5). In language teaching, discourse analysis has proven to be a robust research tool in detecting patterns in classroom communication (Sinclair & Coulthard, 1975). Language researchers employ discourse analysis toward their objective of understanding how humans learn language.

"Classroom discourse is a central part of this social context, in other words the verbal interaction shapes the context and is shaped by it" (van Lier, 1988, p. 47). In a similar vein, Fairclough defines discourse as the use of language as social practice, and discourse analysis as the analysis of how texts work within sociocultural practice (Fairclough, 1995, p. 4.) As Vygotskian sociocultural theory posits that learning is discursively constructed, discourse analysis is an appropriate data analysis method to employ in this study of chat room communication in the foreign language class.

Methodologically, discourse analysis can be problematic. As discourse can be analyzed on any number of levels, there does not exist a well-defined analytical category system for discourse analysis (Larsen-Freeman, 1980). In this study, the method of discourse analysis consisted of searching the transcripts for excerpts that illustrated the phenomena sought in the research questions. Each episode was interpreted and translated into English[6] for consumers of this research who do not know Spanish. Then the excerpts were analyzed in the form of a line-by-line interpretation of communicative behavior during the episode.

Data Reduction

Due to the large amount of data collected during the study (over 300 pages of chat room transcripts), data reduction was necessary. Data reduction involved selecting discourse elements from the transcripts that closely related to the research questions driving the study. This was done by making multiple passes through the data, noting patterns in the data, and focusing in on specific patterns. After the particular patterns were identified, the researcher asked the interrater (see "Interrater Reliability below) to verify

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6. The researcher interpreted what learners were attempting to say based on the context. For the reader's convenience the researcher translated the questionable Spanish utterances into intelligible English.

his selection of excerpts to illustrate the particular phenomenon. Another method of data reduction was the selection of three weeks of transcripts out of the nine weeks for a close analysis (Weeks One, Four and Eight) regarding Research Questions 1 and 2. These weeks were selected for two reasons. First, because the are chronologically dispersed: Week One occurred at the beginning of the study, Week Four in the middle, and Week Eight almost at the end. Second, the topic of week one (la libertad - *freedom*) was neither a very popular nor a very unpopular topic among the learners. The topic of week four, el cine (*the movies*), was a very popular topic. Los animales (*animals*), the topic of week eight, was rather unpopular.

An additional (involuntary) form of data reduction in this study was that of learner absenteeism. While there were 33 learners in the study, the absenteeism rate on any given day was never less than 10% of learners in each class. Therefore, there are fewer total learner contributions in each transcript than there would have been if all learners had been present for all chat sessions. Questionnaire and interview data were not reduced in any way.

Data Indexing

After searching for and finding patterns in the data, data indexing was the next step in analysis. Following Miles and Huberman (1994) data indexing consisted mainly of pattern-coding of elements in the chat transcripts that constituted an answer to Research Questions 1, 2 and 5 (see "Questionnaire Analysis" and "Interview Analysis" for data indexing procedures for Questions 3 and 4). Miles and Huberman suggest the creation of a provisional "start list" of codes prior to field work, which derives from the conceptual framework and research questions of the study (Miles & Huberman, 1994, p. 58). This study followed the coding guidelines established by Miles and Huberman. Data coding occurred at various stages of the research process. During the course of this study, new codes were created and revised after the formulation of the start lists. Part of the revision of codes included dropping original categories from the start list, for which support was not found in the data. To create the start list, the researcher reflected on the research objectives of the study and consulted previous studies on synchronous CMC in language classes. Table 3.1 shows the start list for Research Question 1 (interactional features). The start list for Question 5 (changes in output) was taken from Kern's 1995 study of French L2 learners (see "Measurement of language quantity, complexity and accuracy").

TABLE 3.1

Start List for Research Question 1

zone of proximal development
scaffolding
intersubjectivity
social cohesiveness
self-correction of errors
correction of each other
requests for clarification
addressivity
off-task discussion
switching to English
use of emoticons and special orthography

The start list. The first three items in the table refer to general constructs of sociocultural theory (described in the literature review). In formulating the start list, the researcher made the supposition that the chat transcripts might reveal observable occurrences of these constructs. "Social cohesiveness" is a category that the researcher created based on previous research findings, which included learner use of language functions that were specifically for the purpose of demonstrating their belonging to the social group.

The next four items in the table constitute communicative strategies that the researcher supposed the learners and instructor might utilize during their discussions in order to co-construct meaning and maintain discourse. Most of these strategies have been reported in the SLA literature on face-to-face conversation. Addressivity (making it clear to whom one addresses an utterance), however, is not as important in a face-to-face context when interlocutors look at each other when speaking. Addressivity in the chat room context was theorized to be a potentially important phenomenon due to the number of threads of discussion that may occur simultaneously.

Off-task discussion and switching to English were predicted due to the extensive amount of time that learners were to spend engaged in collaborative dialogue in their foreign language and in the new electronic medium. It was hypothesized that learners would make longer utterances than in the classroom due to the fact that the chat room medium turns over to them a great deal of control of conversation. This would allow or encourage them to contribute personal anecdotes and/or narratives of events, the occurrence of which is often limited in the classroom situation. It was also hypothesized that the learners, given this element of control, would opt to abandon the assigned topic/task at times, in favor of topics of their choice. Finally, it was hypothesized that the learners would switch to English from time to time. Detecting a pattern in switching to English was deemed by the researcher to be a potentially interesting phenomenon to analyze in the chat room data.

Finally, it was predicted that learners and the teacher would manifest some interactional features specific to the electronic mode of communication. It has been documented in the synchronous CMC literature, for example, that communicants replace acoustic and nonverbal features of face-to-face communication with emoticons and special orthography. "Emoticon" is the Internet term for a combination of keystrokes that create the appearance of a facial expression on the computer screen. For example, the combination of the "colon" key, the "right bracket" key and the "right parentheses" (or a variation of combination) creates a "smiley face" :>). Similarly, chat room communicators often use alternative spellings to indicate stress or intonation or other language features that are normally only communicated by the sound system of the language. For example, representing the word "no" as NOOOOOOO! effectively communicates in writing that the communicator would be raising her or his voice and elongating the word.

Evolution [illegible]arch Questions 1 and 2, and the interactional features categories. During the initial passes through the chat room transcripts, the researcher kept the items on the start list in mind. During these initial passes, it became evident that some minor changes in wording should be made in Research Questions 1 and 2:

Research Question 1: What are *some outstanding* interactional features in chat among learners and the teacher?

Research Question 2: What effects do *structured versus open-ended* communicative tasks have on *chat room interaction*?

The change in Research Question 1 (in italics) was necessary because it would not have been possible to describe *all* interactional features of chat room communication, but rather some interesting features. The change in Research Question 2 was motivated by a need to describe more specifically the difference in task types, coupled with the observation that the differences in task had more of an effect on the overall chat room communication than on the individual interactional features of Research Question 1.

After a few passes through the data, it occurred to the researcher that one of the most interesting characteristics of the chat sessions was whether or not it appeared that the learners (and the teacher when she was present) had achieved intersubjectivity with each other. Thus, intersubjectivity became the sociocultural construct of major importance, and the zone of proximal development and scaffolding constructs were removed from the list of interactional features. As intersubjectivity has recently been an issue of debate among sociocultural theorists, Chapter 4 of this dissertation constitutes the researcher's effort to explore the issue of intersubjectivity in greater depth than previous SLA studies had done. From the start list, self-correction of errors, correction of each other, and requests for clarification were abandoned in favor of a local context-centered analysis of how intersubjectivity is brought about and maintained. Addressivity was also abandoned as a category, as initial passes through the data did not uncover anything interesting in this area, other than the fact that lack of addressitivity could complicate intersubjectivity when it was not clear to what previous utterance a given utterance related. Use of emoticons and special orthography was also abandoned as a category. Off-task discussion was maintained as a category, as the data manifested a great deal of interesting off-task behaviors. The use of English was also maintained as a category of interactional features. Finally, two new categories emerged from the data, "identity/role play" and "flaming". The interactional features discussed in Chapter 4, then, are the following: (1) intersubjectivity, (2) off-task discussion, (3) social cohesiveness (including greeting, leave-taking and humor), (4) identity/role play, (5) sarcasm/insults, and (6) use of English.

Data Display

As in the data indexing in this study, the data display followed the guidelines set forth by Miles and Huberman (1994) in their seminal book on qualitative data analysis. Data display, according to Miles and Huberma, consists of presenting the data in a format that facilitates data interpretation. Following discourse analysis methodology, illustrative excerpts were extracted from the chat transcripts and analyzed individually. Other types of data (i.e., from the questionnaires) were displayed in tables as outlined in Miles and Huberman (1994).

Questionnaire Analysis

The learner and teacher questionnaires, along with the interviews, were the principal means used to answer research Research Question 3 and 4, regarding learner and teacher perceptions of the use of chat rooms. Unlike closed question questionnaires that can be readily quantified for analysis, responses from open-ended questions are more difficult to manage due to the wide range of responses (Nunan, 1992, p. 145). Nunan proposes a system for analyzing open-question questionnaires, which he calls "key word analysis" (Nunan, 1992, p. 146). This system involves, as its name implies, searching for key words in participant answers. Each time a new key word is determined, a new category is made. In this way, by the end of the analysis, all participant responses fit into established categories, even if some answers make up their own categories. Lincoln and Guba suggest carrying out the categorization by placing individual entries onto index cards and sorting the index cards into categories (Lincoln and Guba, 1985, pp. 347-348).

The learner questionnaire given at the end of this study consisted of three parts. Part A employed three Likert scale items for background information about the learners, including their experience and comfort with using computers, as well as their level of interest in learning Spanish. The Likert items were analyzed by entering the data into a spreadsheet and calculating averages for the 33 learners who answered the questions. Also included in Part A was a question asking if learners had participated in an Internet chat prior to the study. Responses to this question were calculated in percentages.

Part B consisted of 11 Likert scale statements (adapted from Kern, 1995) to which learners were asked to indicate the extent of their agreement. These items were analyzed in the same way as the Likert scale items in Part A. That is, the numerical responses were entered into the spreadsheet and averages were calculated.

In Part B and Part C, questionnaire analysis was carried out using the category system outlined by Nunan and similar to the index card method described by Lincoln and Guba. First, the researcher transcribed all responses to Part C into one table for each learner in a Word Perfect document. Next, individual tables were prepared for responses to each question. For example, Part C, Question 1, had its own table showing the responses of all 33 learners to the question (some learners skipped some of the open-ended questions, in which cases the researcher attempted to get the information in follow-up interviews). Questions 2-16 were analyzed the same way. The responses in Part B were combined with those in Part C to generate the categories for data analysis. For example, the statement in Part B, "Reduced amount of feedback from the instructor was a drawback", was considered to be a disadvantage of chat room communication, and was thus analyzed together with Part C, Question 4, an open-ended question which asked learners if they felt that any aspects of the chat session were unhelpful. In analyzing Parts B and C together, several categories emerged: usefulness of chat, likes/dislikes, advantages/disadvantages, pseudonyms/identities, topics, tasks, instructor presence, assistance during chat sessions, learning from chat, and other perceptions. Finally, the categories determined by the researcher were subjected to interrater reliability (see below).

Interview Analysis

Rubin and Rubin (1995) indicate that data analysis begins while the interviews are underway. Researchers should examine the data heard after each batch of interviews, pulling out important concepts and themes (Rubin & Rubin, 1995, p. 226). According to Rubin and Rubin this preliminary analysis tells the researcher how to redesign questions to focus in on central themes as interviews continue. Then, after interviewing is complete, more detailed analyses can be made. Rubin and Rubin propose an analysis system almost identical to that of Nunan's keyword system for analyzing questionnaire data. Rubin and Rubin further explain that after interview data coding is complete, overall descriptions are formed based on what different people said within each category. Then the researcher seeks out "broader significance" by asking if the data support, modify or contradict existing theory (Rubin & Rubin, 1995, p. 229).

The interviews in this study served mainly to fill in missing questionnaire data or to expand and/or clarify questionnaire responses. As such, the interview data were analyzed together with the questionnaire data, i.e, interview data were integrated into the categories generated in the questionnaire analysis.

Interrater Reliability

In qualitative studies, which do not rely on statistics to back their data analysis, intercoder (or *interrater*) reliability must be obtained (Miles & Huberman, 1994). To do this, a second researcher verifies the coding of the original researcher. The formula that Miles and Huberman give for intercoder reliability is the number of agreements divided by the number of agreements and disagreements. For example, if two coders in a study agree on 180 codes out of a total of 200 codes, then the intercoder reliability is 180/200, or 90%.

The interrater in this study was a colleague of the researcher who had extensive knowledge of the dissertation study. After the researcher oriented the interrater to the codes used in the study, both researcher and interrater looked at the coded categories and discussed their agreement or disagreement with each occurrence in the data. In Research

Questions 3 and 4, the researcher noted the categories that evolved from the learner and teacher perceptions reported in the questionnaires, and submitted the codes to the interrater for verification. Out of the 380 codes generated in this data, there were very few discrepancies in interpretation between researcher and interrater (less than 15). After discussing the discrepancies, the researcher and the interrater were able to come to an agreement in all cases, thus final interrater reliability was 100%. The same procedure was followed for coding of verb forms in Research Question 5. Out of 3,848 total verbs, there were 24 discrepancies in categorizing them. All of these discrepancies were worked out, however, giving an interrater reliability of 100%.

Measurement of Language Quantity, Complexity and Accuracy

In a recent study of synchronous computer-mediated communication in a second-semester college French class, Kern (1995) compared a chat session to a face-to-face conversation of the same topic, in terms of language quantity and complexity. Kern measured quantity in terms of number of student messages/turns and length of messages in complete sentences/T-units. In another part of the same study, Kern calculated the number of different discourse functions employed by the learners in their chat sessions. Example discourse functions are greetings, assertions, narratives, questions, commands and self-corrections, as well as a category "other types of messages", which included such functions as recapitulation of another's comment, delegation of the floor, and being off-topic. Finally, Kern measured morphosyntactic features of the output of his French learners. He calculated the number of occurrences of several verb tenses and moods, as well as coordinating and subordinating conjunctions, and relative pronouns. Given that the learners in Kern's study produced more language overall in the chat room, it is not counterintuitive that they also produced larger numbers of almost all of the structures that Kern chose to analyze. Since Spanish, like French, is a morphologically rich language in terms of its verb system, the researcher decided to follow Kern's study in the calculation of usage of verb tenses and moods as an indicator of complexity of learner output. This was after reviewing a number of measurements for language quantity and complexity in writing (Wolfe-Quintero, Inagaki, & Hae-Young, 1998). It was expected that the intermediate-level learners in this study would attempt to branch out from the familiarity of the present tense, to express ideas in past and future tenses, as well as perhaps the complex tenses and also the subjunctive mood. Additionally, it was believed that learners might, in time, use increasing numbers of coordinating and subordinating conjunctions, as well as relative pronouns. This would show that they were forming more complex sentences than the simple sentence.

Following the group profiles of verb morphology, three individual learners were tracked. In addition to the profile of frequency of use of verb forms, an accuracy measure was taken for the output of these learners. This more detailed information was used as a comparison to group norms and as a springboard for discussion in Chapter 7.

Data Interpretation

The final aspect of data analysis, interpretation, involved building a coherent understanding of the patterns in the data (Miles & Huberman, 1994, p. 286). Data presented in discourse excerpts and tables were interpreted and explained in terms of the sociocultural theoretical framework that drove this study. Data interpretation was done in the discussion sections of Chapters 4, 5, 6 and 7. Conclusions were stated in Chapter 8.

Summary

This dissertation study employed a case-study approach to qualitative research, with incorporated elements of ethnographic research and discourse analysis to enhance the research methodology. The study was conducted in nine weekly chat sessions in two intermediate Spanish classes at the University of Pittsburgh. Five research questions drove the study. Data were collected in the form of a pre-study teacher interview, chat room transcripts, researcher field notes, learner and teacher questionnaires, and learner and teacher post-study interviews, as well as existing information about the participators and the research context that were pertinent to the study. Data analysis followed guidelines set forth in the scholarly literature on the qualitative paradigm of research.

Specific data analysis procedures included discourse analysis, data reduction, indexing and display, as well as measurement of quantity and complexity of learner output in the chat sessions. Data interpretation involved explaining patterns found in the data analysis, and providing implications for further research and pedagogical practice.

CHAPTER 4

INTERACTIONAL FEATURES

This, the first of three chapters of data analysis, will address Research Question 1: "What are some outstanding interactional features in chat among learners and the teacher?" Discourse analyses will describe interactional features such as intersubjectivity, off-task discussion, social cohesiveness, use of humor, sarcasm/insults, and use of English. The chapter will conclude with a discussion of the findings.

Research Question 1: What are Some Outstanding Interactional Features in Chat among Learners and the Teacher?

The literature on synchronous CMC describes numerous characteristics of chat room interaction. Research Question 1 of this study aims to uncover the features of chat room communication that may or may not lead to co-construction of meaning, an essential aspect of collaborative dialogue. Sociocultural theory will be invoked to explain the interactional features that are found, as well as their implications for L2 use and development.

Intersubjectivity

Intersubjectivity, according to Rommetveit, occurs when communicators achieve a "shared social world" (Rommetveit, 1974, p. 29). For genuine communication to occur, there must be a shared context among the communicators. Thus, if intersubjectivity does not exist at the beginning of a conversation, it must be established (Rommetveit, 1985). In a sociocultural view of language development, interlocutors must activate and operate within a learner's ZPD for development to occur in the learner (Vygotksy, 1978, p. 86). Activating and operating within a learner's ZPD is a process that requires a high degree of fine tuning. For this reason,achieving intersubjectivity can be considered an essential element in activating the ZPD

Intersubjectivity has been the object of discussion as sociocultural theorists begin to explore the construct more fully (Wells, 1998). For Wells, it is the establishment, breakdown and re-establishment of intersubjectivity that contributes to L2 learning, more so than the mere maintenance of intersubjectivity (Wells, 1998). Also an issue is Habermas' use of the word "agreement" in his conceptualization of intersubjectivity. That is, is it necessary that interlocutors come to an agreement or consensus in order to say that intersubjectivity has been established? Researchers such as Wells (and the present researcher) would say no. "Intersubjectivity does not necessitate agreement of perspective or point of view, as Matusov (1996) makes clear. However, for the sequence to proceed, there must be an orientation toward intersubjective agreement about 'what is going on,' even if that is disagreeing" (Wells, 1999, p. 266).

Habermas defined four universal validity claims that he believed to be necessary for intersubjectivity to take place. That is, anyone who wants to participate in a process of reaching understanding must: (a) utter something intelligibly, (b) give (the hearer) something to understand, (c) make herself thereby understandable, and (d) come to an understanding with another person (Habermas, 1998, p. 22). For Habermas, it is necessary to analyze the process of reaching an understanding (or intersubjectivity) from the dynamic perspective of *bringing about* agreement (Habermas, 1998, p.23). When at least one of the validity claims is not satisfied, communicative action cannot be continued. In other words, intersubjectivity is lost. When this happens, interlocutors must achieve a new definition of the situation that all participants can share, if communication is to continue. If the attempt to reestablish intersubjectivity fails, then the communicators are faced with switching to some sort of strategic action, breaking off communication altogether, or recommencing action oriented toward reaching understanding at a different level.

This section aims to contribute to the ongoing discussion of intersubjectivity by examining the shape that intersubjectivity takes during extensive L2 collaborative dialogue in a synchronous CMC medium. It is theoretically interesting to examine this construct for at least two reasons. First, it is worthwhile to observe to what extent learners are able to achieve, negotiate and maintain intersubjectivity given their limited proficiency in their second/foreign language. Second, it is interesting to observe how learners achieve intersubjectivity in an *electronic* communicative environment, an environment that puts learners in a different situation from that of face-to-face conversation. Finally, the concept of intersubjectivity is usually referred to in communication between two persons, whereas in this study intersubjectivity will be looked at in the context of groups of three to five persons.

The following discourse analyses explore the nature of intersubjectivity within on-task discussion, i.e., when learners focused their conversation on the assigned topic and/or communicative task. Larsen-Freeman refers to such communicative focus on a topic as *topic management* (Larsen-Freeman, 1980). Off-task discussion is another interactional feature of interest, and will be analyzed later in this chapter. Examples of different types of intersubjective states were taken from Week One, Week Four and Week Eight. These weeks were chosen for two reasons. First, they are chronologically spaced apart: one week occurred in the beginning of the study, one in the middle, and one toward the end. Also, the topics of these discussions differed in popularity with the learners. The topic of Week One, La libertad (*freedom*) was ranked as a most-liked topic by several learners in the post-study questionnaires, but was ranked as a most disliked topic by a near equal number of learners. The topic of Week Four, El cine (*movies*) was a very popular topic according to the questionnaires. Los animales (*animals*), the topic of Week Eight, was very unpopular. It was hypothesized that varying degrees of interest in the topic might manifest itself in the nature of intersubjectivity that learners would achieve and maintain in their discussions. That is, learners might have found it difficult, or they might have been unwilling, to achieve intersubjectivity on a topic that did not interest them. The researcher thus determined that looking closely at these three weeks would provide an interesting exploration of the intersubjectivity construct.

A few notes about the following discourse analyses is in order, to orient the reader. First, the eight chat groups for each week (sometimes only six or seven due to absenteeism) were assigned a letter from A to H, in the order in which they occurred in the transcripts. Episode 1A, for example, is the first chat room of the 11:00 section. Episode 1B is the first chat room of the 12:00 section. The sequence continues until the letter "H", the fourth chat room in the 12:00 class. A second note has to do with the English translation of the Spanish transcripts, provided for the reader's convenience. The translations have been rendered in English in as parallel a manner as possible. Thus, the grammatical errors that were produced in Spanish were carried over into English whenever possible, to give non Spanish-speaking readers a more complete sense of the flavor of the original utterances. Brackets indicate that the researcher was unsure of the communicator's exact meaning in Spanish. Finally, the learners' names are given as their first initials. The instructor is "I".

Episode 1: La Libertad (*freedom*)

The structured task assigned to 6 of the 8 groups consisted of six steps. Briefly, these steps involved forming a definition of *freedom*, making a list of freedoms that one would expect to find in a country's constitution, searching for constitutions of Spanish-speaking countries on the Internet, and discussing the freedoms found in those constitutions (see Appendix F for complete task). The open-ended task assigned to 2 of the 8 groups merely instructed learners to hold a discussion about freedom. It listed some possible directions for their discussion to take, but gave no concrete steps as the structured task did. The two segments chosen for analysis in this episode illustrate two different examples of intersubjectivity. In Segment A (Episode 1A - structured task), intersubjectivity is established for a brief time and then breaks down. The interlocutors fail to regain an intersubjective state during the remainder of their discussion. In Segment B (Episode 1F - structured task), intersubjectivity is established, maintained, and not lost (except for one learner who very briefly was lost) from the beginning of the segment until the end of the episode from which the segment was taken.

Segment A illustrates the establishment and subsequent breakdown of intersubjectivity. The chatters in this segment are Alicia (A), the instructor (I), Javier (J), Mía (M) and Pablo (P). After the learners greet each other, Pablo (who is actually a female) suggests that they begin talking about freedom.

Segment A.

1	P: Debemos hablar sobre la libertad	*P: We should talk about freedom*
	J: Epa pablo como estas	*J: Hey Pablo how are you*
	P: bien estoy cansada	*P: good I'm tired*
	P: y usted?	*P: And you?*
5	P: Mia	*P: Mia*
	J: La libertad? bueno chamo ustedes tienen mucha libertad en los estados unidos	*J: Freedom? Well man you have a lot of freedom in the united states*
	A: La libertad...	*A: Freedom...*
	P: si	*P: Yes*
10	J: En cuba no tenemos la libertad como ustedes	*J: In Cuba we don't have freedom like you*
	P: pero creo que la cultura espanola es mejor para jovenes	*P: but I think Spanish culture is better for young people*
	A: Para mi, la libertad es el derecho a votar y ser un induvidual	*A: For me, freedom is the right to vote and to be an individual*
15	A: Pablo..porque?	*A: Pablo..why?*
	P: puedes estar con la familia y no necesitas estar desconcierto	*P: You can be with your family and you don't need to be [disconcerted]*
	M: Creo que libertad es el derecho para ser que quieres?	*M: I think freedom is the right to be what you want?*
20	M: !	*M: !*
	I: Pablo, Que quieres decir con desconcierto?	*I: Pablo, What do you mean by desconcierto?*
	J: Mia estoy de acuerdo	*J: Mia I agree*
	P: que quieres mia	*P: What do you want mia*
	P: embaressado	*P: [embarassed]*
25	M: Quiero mucho, gracias Pablo	*M: I [want/love] a lot, thanks Pablo.*
	P: oue en particular	*P: What in particular*
	I: Estas embarazado? Pregnant???	*I: Are you pregnant? Pregnant???*
	J: Mia quieres mucho a Pablo?	*J: Mia do you love Pablo a lot?*
	P: nooooooooooo	*P: noooooooooo*
30	M: No	*M: No*
	M: NO	*M: NO*
	P: la libertad	*P: Freedom*
	I: Entonces, que quieres decir?, como se dice en espanol?	*I: Then, what do you mean?, how do you say it in Spanish?*
35	P: quiero hablar sobre la cultura americana	*P: I want to talk about American culture*

Pablo establishes a context for the conversation, i.e., a potential starting point for intersubjectivity. After a few lines of greetings (Pablo had just entered the room), Javier, who had presented himself as a Cuban, puts forth his perspective on freedom by stating that U.S. citizens enjoy a great deal of freedom, as compared to Cuba. Mía reiterates the word "libertad", followed by ellipses, presumably to indicate that she is thinking about the proposed topic. Thus, it appears that the three of them have established a shared context and are attempting to engage in a discussion of it. But in line 11, the shared context is redirected by Pablo's statement about youth in Spain, which does not seem to follow the established topic (or if it does, it is not clear *how* it does). Alicia and Mía continue to talk about freedom, but both Alicia and the instructor are drawn to determining how Pablo's statement contributes to the established context. In line 22, Javier agrees with Alicia's last statement about freedom. Between lines 23 and 31, though, the previously shared understanding of the communicative context is redirected. It appears that the communicators realize that they are not understanding each other, and they decide to make a joke of it (talking about loving each other and being pregnant). In lines 31-32, there is an attempt to regain intersubjectivity with relation to the original topic (freedom). Pablo utters the word "libertad" and the instructor pushes Pablo to explain what she meant by her earlier comments. Pablo then indicates that she would rather talk about American culture. This might be her way of reestablishing an intersubjective state — by transforming the topic to something she can relate to more easily. As the episode continues, we will see the fluid state that intersubjectivity takes on in this conversation.

36	J: La libertad es nuestro derecho para disfrutar la vida	J: *Freedom is our right to Enjoy life*
	M: Libertad es el derecho para estar emberazado	M: *Freedom is the right to be Pregnant*
40	I: Hey, chicos organicen el tiempo para que puedan discutir todos los puntos que tenemos para hoy.	*I: Hey, guys, organize your time so that you can discuss all the points that we have for today.*
	I: Si, es verdad, la libertad puede ser el derecho a estar embarazada o no	*I: yes, it's true, freedom can be the right to be pregnant or not.*
45	J: creo que no	*J: I think not.*
	M: porque Javier?	*M: why Javier?*
	J: porque todo el mundo ya estan teniendo nios sin la autorizacion del govierno	*J: because everyone are already having kids without government authorization*
	J: y eso nos es un derecho de nosotros	*J: and that is a right of ours*
50	J: es parte de la vida del ser humano	*J: it's part of a human being's life*
	J: evolucion	*J: evolution*
	P: creo que es muy dificil para los chicos en los estados unidos prque la cultura dice que todos necesitan "to act" lo mismo	*P: I think it is very difficult for kids in the United States because the culture says that everyone has "to act" the same*
55	P: pero no es importante	*P: but it's not important*
	J: Quien dice eso	*J: Who says that*
	P: Humanos necesitan tener Un Padre Grande en el govierno	*P: Humans need to have a Great Father in the government*

	J: Como el senor	*J: Like the Lord*
60	J: MIA ALICIA como estan por alli	*J: MIA ALICIA how are you doing there*
	M: estoy pensando...	*M: I am thinking*
	J: Creo que Bill Clinton es un padre grande no	*J: I think that Bill Clinton is a great father no*
	J: en que Mia	*J: about what Mia*
65	P: si, creo que los humanos suprimen las emociones naturales para la sociedad y nececitamos tener una persona para regular los instinctos naturales.	*P: yes, I think humans repress natural emotions for society and we need to have a person to regulate natural instincts.*
	A: si..Bill Clinton es un padre grande..	*A: yes..Bill Clinton is a great father..*
70	M: este es un parte de la vida como muchos personas no acuerdan	*M: this is a part of life that many People don't agree on*
	P: no puedo decir que hay una persona en todo el mundo que esta perfecto para el trabajo	*P: I can't say that there is a person in the whole world who is perfect for the job*
75	P: no quiero ir a un otro web page	*P: I don't want to go to another web page*

Mía attempts to incorporate the misunderstanding about "embaressado" into the discussion with her comment that freedom is the right to be pregnant. The instructor agrees with Mía before she leaves the room. Javier disagrees and explains why (maintaining his Cuban identity and referring to Cuba), which indicates that he shares the new context. In line 52, Pablo redirects the topic and Javier follows her initiated topic with a related question. Pablo states that what she said was not important. Then she makes a statement referring to a "Padre Grande" in the government (line 57), which presents yet another redirection of the topic. Javier once again tries to share the new context with Pablo and solicits input from the other two interlocutors, who have not contributed for a while. Alicia and Mía then join in and attempt to share the new context. Pablo puts forth what seems to be another redirection of the topic, followed by a statement (line 76) that precipitates the beginning of another step of the activity.

What is interesting to note in this segment is that the communicators seem to have achieved intersubjectivity at the beginning, and then to have lost it for a period of time, only to begin to regain it later for very short periods of time. Pablo initiated new contexts several times throughout the segment and the other communicators attempted to connect with her and share the newly initiated contexts. It can be seen that intersubjectivity broke down whenever at least one of Habermas' validity claims was broken. For example, in lines 16, 24 and 25, the intelligibility requirement was broken when the communicators put forth unintelligible utterances. When the other communicators pursued the intended meanings of these unintelligible utterances all at once, intersubjectivity was lost for a period of time. In lines 35-50 there seems to have been a shared perspective once again, but after line 51, too many new contexts were brought into the discussion, which broke down the group intersubjectivity. In other words, the four communicators did not make themselves understandable and did not reach an understanding with each other long enough to maintain coherent conversation. Furthermore, although they achieved intersubjectivity with each other at times throughout the discussion, their discussion ended up skirting the issue that they began talking about at the beginning of the segment. As a result, their discussion did not progress according to the assigned task. Nevertheless, there was at least a partial understanding among the communicators during much of the segment, which was brought about entirely in Spanish (except for the instructor's use of the word *pregnant*).

Larsen-Freeman informs us that what people do in discourse sets a task for the other communicators (Larsen-Freeman, 1980). For example, if one interlocutor stops communicating, then the others are automatically given the task of discourse maintenance. Also, initiating a task involves a solicitation on the part of one interlocutor. The other interlocutors then either accept the solicitation or reject it. It can be seen in this segment that all four communicators solicited the initiation of a conversational context at the beginning, but the solicitations of two of the communicators (Alicia, line 12, and Mía, line 17) were not incorporated into the conversation. These solicitations were rejected in favor of those of Pablo and Javier. Also, Alicia and Mía were silent for significant periods of time, which automatically assigned Pablo and Javier the task of discourse maintenance. Thus, we can see that the intersubjectivity in this L2 chat room context is both fluid and fragile.

According to Schegloff's (1992) theory of defending intersubjectivity, repair of lost understanding must generally occur within three turns of the trouble-source. If repair is not made within the three (or sometimes four) turns, then such repair as is attempted becomes "next relevant". The problem with becoming next relevant is that the repair may never again be relevant. While Schegloff researched turn-taking in face-to-face oral interaction, Segment A corroborates Schegloff's findings in the chat room context as well. The breakdown in intersubjectivity in line 21 of Segment A was still not recovered by line 34, therefore the entire shared communicative context was beyond repair.

In other electronic discussions during the same week, intersubjectivity took on different shapes. Segment B demonstrates the establishment and *maintenance* of intersubjectivity during another episode in Week One. The communicators in this segment are Amparo (A), Diana (D), Humberto (H), the instructor (I), and Mario (M).

Segment B.

1	H: La forma politica del Estado espanol es la mMonarquia parlamentaria	H: *The political system of Spain is a parliamentary monarchy*
	A: si, como Ingleterra	A: *Yes, like England*
	H: interesante. No?	H: *Interesting. Isn't it?*
5	M: La constitucion de Mexico dice tambien que la esclavitud esta prohibida.....Pero en Ingleterra la monarquia no tiene mucho control politicamente, no?	M: *The constitution of Mexico also says that Slavery is prohibited....But in England The monarchy doesn't have much political Control, right?*
10	A: la gobierno de la Argentina es casi democracia	A: *the Argentine government is almost democracy*
	D: En la constitucion de venezuela, hay un derecho para practica la fe religiosa	D: *In the constitution of Venezuela, there is a Right to practice religious faith*
	A: la monarquia? no, no tienen mucho control	A: *the monarchy? no, they don't have much control*
15	H: Si en la Ingleterra la monarquia no tiene nada control	H: *Yes in England the monarchy doesn't have nothing control*
	A: son...como se [illegible]e...son figuros publicos solamente	A: *they're...how do you say...they're public figures only*
	I: POr que dices que el gobierno de Argentina es CASI democratico?	I: *Why do you say the Argentine government is ALMOST democratic?*
20	H: ningun, lo siento	H: *any, I'm sorry*
	A: um...no se...	A: *um...I don't know...*
	Que tipo de poder tiene la monarquia en Espana? Alguien sabe?	I: *What type of power does the Spanish monarchy Have? Does anyone know?*
	D: no se	D: *I don't know.*
25	A: ahora, no se	A: *now, I don't know*
	H: parlamentaria	H: *parliamentary*
	A: pero en 1500's, la monarquia tiene mucho poder	A: *but in the 1500s, the monarchy has a lot of power*
	M: No tengo nada idea.	M: *I don't have nothing idea.*
	I: Si, y actualmente, tiene poder en la Revista "Hola". Con[illegible]en esta Revista?	I: *Yes, and currently, it has power in the magazine "Hola". Do you know this magazine?*
30	A: quien tiene la constitucion de espana?	A: *who has the constitution of spain?*
	A: no	A: *no*
	M: Mi, no	M: *Me, no*
	D: mi no tambien	D: *me not also*

I: Si en 1500 la monarquia tuvo todo el poder junto con la iglesia	I: *Yes in 1500 the monarchy had all the power together with the church*
H: si	H: *yes*
A: ah, si, como el Inquisicion	A: *ah, yes, the Inquisition*
I: Yo tampoco la tengo	I: *I don't have it either*
M: Creo que es muy dificil buscar los otros "web pages" y tratar hablar espanol al mismo tiempo!	M: *I think it is very difficult to look for the other web sites and try to speak Spanish at the same time*
I: Si, la Inquisicion. Que tipo de poder tuvo la Inquisicion?	*I: Yes, the Inquisition. What type of power did The Inquisition have?*
D: si!	*D: yes!*
A: son dictadores!! "convert" o morir...	*A: they are dictators!! "convert" or die...*
H: y despues de la gurra civil tiene una dictador	*H: and after the civil war it has a dictator*
I: Paciencia, escogan un solo pais, y vayan todos a la misma constitucion. Eso puede ayudarlos.	*I: Patience, choose just one country, and everyone go to the same constitution. That can help you.*
D: estoy confusada, que es la Inquisicion	*D: i'm confused, what is the inquisition*
A: the Inquisition?	*A: the Inquisition?*
I: Si, despues de la Guerra Civil HUBO un dictador	*I: Yes, after the Civil War there WAS a dictator*
D: es la iglesia y el gobierno juntos?	*D: is the church and the government together?*
I: Gracias Amparo	*I: Thank you Amparo*
I: Todavia estas confundida Diana?	*I: Are you still confused Diana?*
A: fue cuado la iglesia mueren todos que no fueron catolicos	*A: it was when the church die everybody who wasn't Catholic*
D: ah..si	*D: ah..yes*
M: La Inquisicion es cuando los religiosos dicen, (como Amparo dijo) "convert or muerte"	*M: The Inquisition is when the religious people say, (like Amparo said) "convert" or die*
A: so	*A: so*
A: si	*A: yes*
D: si..yo entiendo ahora	*D: yes..I understand now*
M: No fue un buen tiempo para los protestantes!	*M: It wasn't a good time for Protestants*
I: Si, fue cuando la iglesia mato a todos los que no era catolicos o a cualquiera que no estuviera de acuerdo con las personas que no estavieran en el poder	*I: Yes, it was when the church killed everyone who wasn't Catholic or whoever wasn't in agreement with the people who weren't in power*
A: no fue un buen tiempo para las personas que no fueron catolicos!!	*A: it wasn't a good time for people who weren't Catholic!!*
I: Perdon "de acuerdo", quise decir	*I: Excuse me "in agreement", I meant to say*
M: Exactamente	*M: Exactly*
A: si	*A: yes*
A: vamos al proximo topic?	*A: should we go to the next topic?*
I: Que saben de los judios en Espana en el siglo XVI	*I: What do you know about the Jews in Spain in the 16th century*
M: Podemo, pero es el tiempo para ir.	*M: We can, but it's time to go.*

Humberto establishes a topic - the political system of Spain. The other learners each cite something from the constitutions of countries that interest them, but very quickly they all converge on the topic of the Spanish political system. Intersubjectivity is established. They compare the political system of Spain to that of England. In line 18, the instructor asks a question about Argentina, but gets no answer and then also focuses on the Spanish monarchy. The instructor enters into the shared context and discusses the new topic with the learners. In line 26, Amparo introduces a new context to the same topic (a switch from Spain's present to its past), and the others enter into this new context with her. The instructor points out that the church also had power along with the monarchy, which prompts Amparo to mention the Inquisition. The Inquisition becomes the new context of discussion. Between lines 2[illegible] and 29, there seems to be a confusion about who has the web site open with the constitution of Spain. The instructor attempts to repair the communication breakdown and the conversation continues. Between lines 34 and 39, there is a brief interruption of the flow of the Inquisition topic (as one learner refers back to Spain's present and another is confused about the Inquisition). But the topic reconvenes, intersubjectivity is reestablished and maintained until the end of the conversation.

In lines 14-18, we see how the background of the learners contributes to the ongoing intersubjectivity in this conversation. It is clear that Amparo possesses some knowledge of Spain in the 1500s, whereas Humberto knows about contemporary Spain. By putting their knowledge together they were able to create a shared cognitive and social space and maintain group intersubjectivity (as described by Antón and DiCamilla, 1998), within which the other interlocutors could also participate.

It appears that none of Habermas' validity conditions were violated in this segment, which may explain why intersubjectivity was maintained. The one condition that came into danger of being violated, uttering something intelligibly, was taken care of with the interlocutors corrected their own utterances which they felt might have been unintelligible.

Summary of Episode 1. Segments A and B were selected for analysis because they illustrated two examples of different states of intersubjectivity. In Segment A intersubjectivity was established and broken down early in the segment and was only partially recovered throughout the segment. In Segment B, however, learners and the teacher established intersubjectivity and maintained it throughout the majority of their discussion. In all of the other episodes in Week One of the study, the learners (and the teacher, when she was present) spent a significant amount of time in a state of intersubjectivity, although there were several breakdowns of intersubjectivity. The next section will further explore the shape of intersubjectivity in the chat sessions, looking at Week Four of the study.

Episode 4: El Cine (*Movies*)

The structured task assigned to 6 of the 8 groups consisted of six steps, in which learners were asked to look at a Spanish-language web site about movies, to describe a recent movie they had seen, and then to discuss socio-psychological issues of movies in society (see Appendix F for complete task). The open-ended task assigned to 2 of the 8 groups merely instructed learners to hold a discussion about movies. It listed some possible directions for their discussion to take, but gave neither concrete steps nor grammatical support as the structured task did. Segment C illustrates a pattern of intersubjectivity that was common in the episodes for this week. The excerpt comes from Episode 4A (structured task). The chatters are Alicia (A), the instructor (I), Mía (M) and Pablo (P).

Segment C.

I: Muy bien, que otras peliculas les gustan? Vieron alguna en espanol?	*I: Very good, what other movies do you like? Did you see any in Spanish*
M: GOONIES	*M: GOONIES*
A: Me gusta "the bronx tale"	*A: I like "the bronx tale"*
M: no es en espanol	*M: it's not in Spanish*
I: Vieron "Fresas y chocolate"	*I: Did you see "Strawberries and chocolate"*
M: pero vi la pelicula "beauty and the Beast" en espanol	*M: but I saw the movie "beauty and the Beast in Spanish*
I: La de Walt Disney? Mia	*I: The Walt Disney version? Mia*
M: y tambien "Don Quixote" en espanol	*M: and also "Don Quixote" in Spanish*
M: si de walt disney	*M: yeah the Walt Disney version*
A: mire cartoons en espanol	*A: I saw cartoons in Spanish*
P: si, me encanta woman on a verge of a nervous breakdown. es una pelicula de espana que tiene subtitulos	*P: yes, I love woman on a verge of a nervous breakdown. It's a movie from spain that has subtitles*
P: the verge	*P: the verge*

P: sabes esta pelicula	*P: you know this movie*
M: no	*M: no*
I: A mi me encanta "mujeres al borde de un ataque de nervios" tambien Pablo. Es muy muy comica. Se las recomiendo a los demas...	*I: I love "women on the verge of a nervous breakdown" too Pablo. It's very very funny. I recommend it to the rest of you.*
M: oohhh...quien mire "sliding Doors" con gweneth paltrow?	*M: oohhh... who I saw "sliding doors" with gweneth paltrow?*
M: me gusta mucho	*M: I like it a lot*
I: Esta pelicula , y todas las de Almodovar (un director espanol) son muy buenas. Y pueden encontrarse en la mayoria de las videotiendas en Pittsburgh.	*I: This movie, and all of Almodovar's (a Spanish director) are very good. And you can find them in most video stores in Pittsburgh.*
A: mi favrito pelicula de walt disney es lady y el tramp	*A: my favorite walt disney movie is lady and the tramp*
P: mia, tienes el CD con las canciones de Labrynth	*P: mia, do you have the CD with the songs of Labyrynth*
I: A mi me encanto "Sliding Doors". Me fascino!!!	*I: I loved "Sliding Doors". It fascinated me!*
P: me gusta sliding doors tambien creo que Paltrow es demasiado delgada	*P: I like sliding doors too but I think Paltrow Is too slender*
M: ayer yo oi "You remind me of a Babe" pero estaba de Rap	*M: yesterday I heard "You remind me of a Babe" but it was rap*
P: donde]	*p: where]*
M: en un commercial	*M: in a commercial*
I: Otra pelicula que a mi me encanto fue la de este grupo de hombres desempleado que deciden hacer streeptease. Como se llama? quien recuerda?	*I: Another movie that I loved was the one about this group of unemployed guys who decide to do striptease. What's it called? Who remembers?*
M: Sliding doors es uno de los peliculas ge me gusta ver muchos tiempos	*M: Sliding doors is one of the movies that I like to see many times*
M: veo cosas nuevo todo el tiempo	*M: I see new things all the time*
M: en england...	*M: in England*
M: conoczo este pelicula	*M: I know this movie*
I: hombres desempleados perdon. Recuerdan "You can leave your hat on". Estoy cantando. No es spanglish.	*I: unemployed guys excuse me. Remember "You can leave your hat on. I'm singing. I t's not spanglish.*
P: me gusta la cancion despues ella comio el "peach" y ella esta en un mundo diferente y ella esta bailando con "a mask"	*P: I like the song after she ate the peach and she is in a different world and she is dancing with a mask*
I: THE FULL MONTY. La vieron?	*I: THE FULL MONTY. Did you see it?*
M: si	*M: yes*
M: whew	*M: whew*
M: estaba vover loco	*M: it was drive crazy*
P: no vi	*P: I didn't see*
A: no	*A: no*
M: me gusta The full monty	*M: I like The full monty*
P: vimos Circle of Friends	*P: we saw Circle of Friends*
I: Bueno, chicos. Voy a visitar el otro cuarto. Nos vemos. Y no olviden su lista de temas al final de la clase. Chao	*I: Well, guys. I am going to visit another room. See you later. And don't forget your list of topics at the end of class. Bye.*
M: porque tenie humor de england	*M: because it has humor from England*
M: tengo muchos amigos en england	*M: I have a lot of friends from england*

M: y son muy comico...las palabras usan	*M: and they are very funny...the words they use*
P: me gusta esta pelicula	*P: I like this movie*
A: mi papa es de england	*A: mi dad is from england*

Before the beginning of this episode the learners and instructor were mentioning movies that they liked. At the beginning of the episode, the instructor solicits a new context for the topic -- movies in Spanish. Two learners continue to mention movies in English, then each one enters into the new context, mentioning movies they have seen in Spanish. Pablo and the instructor have one movie in common, "Women on the Verge of a Nervous Breakdown", so they share three exchanges about it. Since the others have not seen this movie, they do not enter into the discussion of it, and they mention more movies that they saw and enjoyed. A few of them, including the instructor, have seen "Sliding Doors" and they comment briefly on it. Then another movie is mentioned and the instructor tries to find out how many saw "The Full Monty", presumably to initiate a discussion of that movie. In the interim, other previously mentioned movies are referred to again, a new movie is mentioned, and it turns out that only one person has seen "The Full Monty". Again, an opportunity to enter into a shared perspective on the same topic is missed. The instructor leaves. Ironically, the learners enter into a state of intersubjectivity which continues after this excerpt, but the topic (England) is a digression from the movie topic, initiated presumably because "The Full Monty" was filmed in England.

In this episode it is clear that there is a shared perspective among the communicators as far as the overall topic -- movies. Beyond that, however, it does not appear that they reached a shared perspective regarding any substantive discussion of movies. The instructor attempted to engage the learners in a discussion of Spanish movies, but this only went as far as mentioning titles and giving a one-utterance commentary on the movies. Instead of communicating within the context of movies that they had not seen, they continue to mention movie titles and do not enter into discussion of any particular movie. The learners finally establish a topic to which they can relate, and they proceed to discuss it. However, the topic they choose is not part of the assigned task.

They therefore had to go off-task in order to achieve intersubjectivity and continue their conversation at a higher level than the mere mention of movie titles.

It appears that none of Habermas' validity conditions were broken in this segment. The learners were intelligible, they put forth something to be understood, and they reached an understanding with their interlocutors. Also, nobody kept silent, which would have obligated the other interlocutors to maintain the dialogue. Although all of Habermas' conditions were met in this segment, the intersubjectivity that was established was rather superficial. The learners agreed on the topic of communication, a necessary first step to intersubjectivity. However, the nature of their discussion was somewhat unilateral in that they mainly uttered lists of movies, rather than converging on a discussion of a particular movie (or movies), which would have afforded them the opportunity to penetrate each other's subjective reality regarding such movies, creating the shared social space that Rommetveit spoke of.

It can be seen, then, that intersubjectivity is manifested in varying degrees. Interlocutors can agree on a topic of discussion, but if they do not develop the topic to the extent that they are able to explore each others' states of subjectivity regarding the topic, then their intersubjective state is a superficial one. In Segment C, several topics (movies) were introduced into the discussion, but none of them were explored beyond one or two related comments. The researcher observed, in fact, that most of the episodes during this week were of a similar nature. The interesting finding here is that learners reported (as will be discussed in Chapter 5) Week Four's topic to be one of their favorites, but yet they often did not elaborate the topic in a substantive manner.

In another episode during Week Four (Epsiode 4D - structured task), a very different state of intersubjectivity from that in Segment C (Episode 4A) emerged. This is illustrated in Segment D. The chatters are Benito (B), Eduardo (E), the instructor (I), Juanita (J) and Lourdes (L).

Segment D.

1	J:	algien personas ha visto la pelicula "the burbs"?	*J:*	*have someone persons seen the movie "the burbs"?*
	B:	no, no conozco esta pelicula	*B:*	*no, I don't know this movie*
	E:	"The Burbs" con Tom Hanks?	*E:*	*"The Burbs" with Tom Hanks?*

B: de que se trata?	*B: What is it about?*
L: Creo que los aspectos psicologicos de las peliculas son muy crucial a sociedad. La pelicula de "gangsters" es no tiene morales buenos a ninos.	*L: I think the psychological aspects of movies are crucial to society. Gangster movies is not have good morals for kids.*
J: pero es interasante	*J: but it's interesting*
J: si the burbs con tom hanks	*J: yes the burbs with tom hanks*
B: yo creo que es importante para los padres defender sus ninos de ver peliculas con morales malas cuando los ninos son pequenos	*B: I think it is important that parents defend their kids from seeing movies with bad morals when the kids are little*
L: Hay los individuos en sociedad que viven sus vidas en base de que ellos ven y oyen.	*L: There individuals in society that live their lives based on what they see and hear*
E: creo que the burbs fue una pelicula muy terrible	*E: I think the burbs was a very terrible movie*
J: no es comico	*J: it's not funny*
B: de que se trata "the burbs"?	*B: what is "the burbs" about?*
J: el tema de the burbs es sobre un neighbor hood donde tom hanks live y todos las personas en el nieghborhhod piensan sus neighbors nuevas son matarlos	*J: the theme of the burbs is about a neighbor hood where tom hanks live and everyone in the neighborhhod thinks their new neighbors are kill them*
B: a, gracias	*B: a, thank you*
B: yo voy a ver esta pelicula, creo	*B: I'm going to see that movie, I think*
J: corey feldman es en the burbs	*J: corey feldman is in the burbs*
L: Si el cine no existera el mundo seria mejor. algunas peliculas danan las mentes de sociedad	*L: If movies didn't exist the world would be better. Some movies damage the minds of society*
L: Hay muchas otras formas de diversiones.	*L: There are other forms of fun.*
B: no se si estoy de acuerdo. croe que el cine puede ser buena cosa. depende del tipo de peliculas. pero entiendo porque dices esto	*B: I don't know if I agree. I think that movies could be a good thing. It depends on the type of movies. But I understand why you say this*
B: y quizas tienes razon	*B: and perhaps you're right*
L: como, el leer, el jugar deportes...jugar instrumentos.... el ensenar sobre historia es el mas importante	*L: like reading, playing sports...playing instruments...teaching about history is more important*
B: si, hay muchissimos cosas que son mas o igualmente importantes.	*B: yes, there are very many things that are more or equally important*
J: yo peinso que es importante ver las peliculas para divertido, on para seriosos	*J: I think it is important to see movies for fun, on for serious*
J: no para seriosos	*J: no for serious*
B: es necessario hacer otras cosas que ver peliculas. no es bueno pasar demasiado tiempo haciendo una sola actividad	*B: it's necessary to do other things than see movies. It's not good to spend too much time doing one activity*
L: Si ensenamos sus hijos de la historia ellos ententeran el mundo mejor. ellos ni la repitaran o la cambiaran	*L: If we teach our kids about history they will understand the world better. They will neither repeat it nor change it*
B: si, tines razon. es necesario conocer mejor la historia.	*B: yes, you're right. It's necessary to know history better*
B: ustedes creen que hay un razon otra que el dinero que se filman las pelicuals	*B: do you think there is a reason other than money that they film movies?*
B: por ejempelo para dar un mensaje a la sociedad?	*B: for example to give a message to society?*
J: hay razon es entertainment	*J: there is reason is entertainment*

55	B: solo etertainment? no hay otra motivacion a veces?	*B: only entertainment? Isn't there another motivation sometimes?*
	J: hasta la vista amigos, tu tienes un buen fin de semana	*J: see you later friends, you have a good weekend*
	B: gracias!	*B: thank you!*
60	B: tu tambien	*B: you too*
	B: adios lourdes!	*B: bye lourdes!*
	L: Mi opinion de el cine es que es no importante en sociedad. El cine proyecta los vistas negativos. La mayoria de los mensajes son negataivos.	*L: My opinion about movies is that they are not important en society. Movies project negative views. The majority of the messages are*
65	Estoy de acuerda que es solamente entertainmento. Mi preferencia personal es : No la mira	*negative. I agree that it is only entertainment. My personal preference is: Don't watch it.*
	L: adios	*L: bye*

Prior to the excerpt, the group was discussing gangster movies. In lines 1-25 of this excerpt, there are two strands of conversation -- the movie "The Burbs" and psychological aspects of movies (step 6 of the assigned activity). Juanita and Eduardo are focused on "The Burbs", while Lourdes is focused on the psychological aspects of movies. Benito moves in and out of both topics for a short time and then focuses exclusively on the context that Lourdes has established. After the shared perspective between Juanita and Eduardo dissolves, Juanita attempts to move into the intersubjective state created by Lourdes and Benito. For some reason Eduardo drops out of the conversation after line 17 (but he is still present in the room). Benito and Lourdes continue their in depth discussion of film in society, with Juanita contributing from time to time. The group maintains its intersubjective state until the end of the chat session.

Unlike most of the other groups this week, this group went far beyond the mere mention of movie titles, reaching the last step of the assigned activity and maintaining a level of intersubjectivity that allowed them to examine in considerable depth the issue of films in society. Another notable aspect of this segment is that the learners agreed with each other at times but did not agree at other times. This shows that a true intersubjective state was reached among them, because they immersed themselves into the perspective of their interlocutors and either accepted or rejected such perspectives. They explain why they do or do not agree. This illustrates an important aspect of intersubjectivity which may be misinterpreted when citing a researcher such as Habermas. When Habermas refers to "agreement" among interlocutors, it is not likely that he meant that they should agree with each other's point of view, as Wells (1998, 1999) points out. In fact, it is the ability to disagree and trace the disagreement back to the original context of the discussion that illustrates that a true intersubjective state has been established. A mere statement of agreement without relating the statement to previous dialogue (as the researcher found in several conversations in this study) does not demonstrate in a convincing way that intersubjectivity has been established.

Summary of Episode 4. In this episode two more states of intersubjectivity were analyzed. In Segment C, the learners agreed on the topic of discussion but failed to achieve a discussion (of the assigned topic) that allowed them to explore each other's subjective reality. In Segment D the learners elevated the assigned topic to a level of academic discussion (following the assigned task) which allowed them to explore each other's subjective reality and accept or reject each other's perspectives. To complete this exploration into states of intersubjectivity in this chat room study, two more examples will be illustrated, from Week Eight.

Episode 8: Los Animales (*Animals*)

The structured task assigned to 3 of the 7 groups consisted of four subtasks. Learners were asked to comment on a Spanish-language talk show about pets of famous people, to talk about their own pets if they had any, to discuss the role of pets in society and how pets are generally treated, and to conclude the session by summarizing the ideas they discussed. No grammatical support was provided this week, but the steps attempted to guide the discussion, as in the other weeks (see Appendix F for the complete task). The open-ended task assigned to the other 4 groups asked learners to talk about pets. In Segment E, taken from Episode 8D, the communicators are Carlos (C), Diana (D), Isabel (I), Juanes (J) and Mónica (M).

Segment E.

1	J: Cuales mascotas tienes tu, Isabel?	*J: What pets do you have, Isabel?*
	C: tienes mascotas Juanes	*C: you have pets Juanes*
	I: tengo un perro, un gato, dos pajaros, cabellos, vacas, patas, pollos	*I: I have a dog, a cat, two birds, [horses], cows, [ducks], chickens*

5 I: si tres	*I: yes three*
J: De que parte eres, Isabel?--si puedo preguntar	*J: Where are you from, isabel? — if I can ask*
C: vives en un granja Isabel?	*C: do you live on a farm Isabel?*
I: si y un "goat" se llama ores	*I: yes and a goat it's name is Ores*
I: oreo	*I: Oreo*
10 I: si...en el campo	*I: yes...in the country*
C: que bonisimo	*C: how really great*
J: Que significa "granja" exactamente?	*J: What does "granja" mean exactly?*
I: en Washington, Pa	*I: in Washington, Pa*
15 C: farem	*C: farem*
I: pienso es un farm	*I: I think it's a farm*
M: vives en una finca?	*M: you live on a farm?*
C: lo siento, farm	*C: I'm sorry, farm*
C: una finca significa granja, mas o menos	*C: a farm means a farm, more or less*
20 C: cuantas patas tienes	*C: how many ducks do you have?*
I: 4	*I: 4*
J: Te gusta montar caballos?	*J: Do you like to ride horses?*
I: uh...si	*I: uh...yes*
J: Cual(es) de tus mascotas son tu(s) favorita(s)?	*J: Which of your pets are your favorites?*
25 I: no tengo favoritas	*I: I don't have favorites*
J: Oh	*J: Oh*
C: Juanes, tienes algunas mascotas	*C: Juanes, do you have some pets*
I: en realidad no me gustan nunca de mis mascotas	*I: Really I don't like never of my pets*
I: son sucias	*I: they're dirty*
30 J: sucias?	*J: dirty?*
J: Que lastima	*J: what a shame*
I: si	*I: yes*

In the beginning of the segment the learners enter into a state of intersubjectivity led by Isabel, as she has a lot of animals at her house to talk about. Isabel begins to mention the animals that she has, and then in lines 12-19, the learners jointly establish the word(s) for "farm" in Spanish so that they can ask her if she lives on a farm. Juanes and Carlos begin to ask Isabel questions about her animals. In line 26, Carlos decides to begin questioning Juanes about his pets, but the conversation continues to focus on Isabel. Diana enters the room and the conversation continues.

34 C: hola diana a cuarto 2	*C: hi diana to room 2*
J: Bienvenida, Diana	*J: Welcome, Diana*
M: hola diana	*M: hi diana*
D: hola todos, finalmente estoy aqui	*D: hi everyone, finally I'm here*
C: tienes animales domesticos diana	*C: you have pets diana*
J: Tiene mascotas, Diana?	*J: Do you have pets, Diana?*
40 J: Isabel si tiene	*J: Isabel does have some.*
D: no, no tengo mascotas	*D: no, I don't have pets*
J: Preguntale a Isabel de la limpieza de sus mascotas	*J: Ask Isabel about the cleanliness of her pets*

D: pero yo comprara un perro en mayo	*P: But I will buy a dog in May*
I: mis pajaros pueden hablar...son sucios tambien	*I: my birds can talk...they're dirty too*
45 D: son sucios!	*D: they're dirty!*
C: que palabra stus pajaros saben	*C: what word s do your birds know*
M: que pueden decir?	*M: what can they say?*
C: palabras tus	*C: words your*
J: De que los has ensenado a hablar?	*J: Of what have you taught them to speak?*
50 I: "pajaro sucio"	*I: "dirty bird"*
J: No te creo	*J: I don't believe you*
M: dicen"pajaro sucio"?!!!!	*M: they say "dirty bird"?!!!*
J: es mentira	*J: it's a lie*
55 D: les dicen "pajaro sucio"?	*D: they say to you "dirty bird"?*
J: DINOS LA VERDAD, ÍSABEL!!!	*D: TELL US THE TRUTH ISABEL!!!*
I: no son pajaros sucios	*I: they're not dirty birds*
J: Son loros?	*J: are they parrots?*
I: pueden decir...hola, buenas dias	*I: they can say...hi, good morning*
60 I: "pajara bonita"	*I: "pretty bird"*

The group greets Diana and immediately brings her into their shared context of discussion. Since Diana has no pets to talk about, the group continues to extract stories from Isabel about her animals. Throughout the rest of this part of the segment, the learners are all engaged in finding out about Isabel's talking birds. In addition to the birds, Isabel has more stories to tell.

61 I: juanes...mi cabra, oreo, piensa que ella es una vaca	*I: juanes...my goat, oreo, thinks it's a cow*
D: ha ha	*D: ha ha*
M: les han tratado palabras malas?	*M: have you tried them bad words?*
I: si y russo tambien	*I: yes and Russian too*
65 C: que ridiculo la conversacion hoy	*C: how ridiculous today's conversation*
J: Perdon, pero que significa "cabra"?	*J: Excuse me, but what does "cabra" mean?*
I: no dicen palabras malas...no tienen bocas sucias	*I: they don't say bad words...they don't have dirty mouths*
C: goat	*C: goat*
J: oh	*J: oh*
70 J: se cree vaca?	*J: it thinks it's a cow?*
I: si	*I: yes*
M: oh, no tienen bocas sucias, peros el resto de sus cuerpos son sucias?	*M: oh, they don't have dirty mouths, but the rest of their bodies are dirty?*
I: si	*I: yes*
75 M: ok	*M: ok*
J: Como se determina algo asi, Isabel?	*J: How does one determine something like that, Isabel?*
I: porque ella vive con las vacas...ella piensa que es una vaca pequita	*I: because she lives with the cows...she thinks she is a little cow*
J: muy interesante	
80 I: si yo se	*I: yes I know*
D: Quieres va al Show de Cristina con sus mascotas	*D: Do you want go to the "Show de Cristina" with your pets*
J: Tienes una vaca que se cree cabra?	
I: decirnos sobre sus gatas, juanes	*I: to tell us about your cats, Juanes*

After the stories about the birds and the goat that thinks it's a cow, Carlos comments that today's conversation is "ridiculous" (line 65). It is not clear if he means ridiculous in the sense that the conversation is very non-academic, or that it is entertaining. However, the story-telling continues for a while. Both Diana in line 45, and Monica in line 73, are interested in why Isabel thinks her animals are dirty. Juanes is interested in finding out why the goat thinks it is a cow. At the end of the episode Isabel is ready to turn the floor over to someone else, and she asks Juanes to talk about his cats.

This was an unstructured task. At the beginning of the episode the learners negotiated whether to discuss the "Show de Cristina" that they had seen about the pets of famous people, or to discuss some other aspect about pets or animals. They spontaneously settled on the topic of Isabel's animals and maintained a state of intersubjectivity in which they shared an interest in what Isabel had to say about the topic. At the end of the segment, Isabel turned the floor over to Juanes and the conversation continued (after the segment), without breaking the topic of pet stories. Habermas' validity claims can also be applied to this segment to show how intersubjectivity was constructed and maintained. Each of the interlocutors contributed intelligible utterances, they put forth something to be understood by others, and they made themselves understood.

Segment F (taken from Episode 8H) illustrates another discussion about animals, this time from a structured activity. The communicators are Adia (Ad), Amparo (A), Lourdes (L) and Paz (P).

Segment F.

1	Ad: Piensen que animales se trata bien en este piaz?	*Ad: Do you think that animals are treated well in this country?*
	P: Si mas que en otros piases. Aqui los animales son parte de la familia	*P: Yes more tan in other countries. Here animals are part of the family.*
5	L: ellos deben gastar su dinero ayudar el medio ambiente o conservar los habitatos de los animales exoticos. Pero, los animales no deben vivir en "captivo"	*L: they should spend their money to help the environment or conserve the habitats of exotic animals. But, animals should not live in captive*
10	A: depende. Hay muchos animales que viven en los calles, pero tambien hay muchos que viven en casas, con familias que se aman.	*A: it depends. There are many animals that live in the streets, but there are also many that live in houses, with families that love them.*
	Ad: Si, y muchos personas son vegetarianos hoy, no?	*Ad: Yes, and many people are vegetarians today, right?*
		A: exotic animals are worth more than animals

A: animales exoticos valen mas de animales
15 como perros o gatos?
A: eso no es justo
Ad: Pienso que muchos veces los animales en
"farms" no se trata muy bien.
Ad: Ponen muchos chemicals en los animales
20 para hacer bien carne.
L: Si las personas que tienen los animales
necesitan tener sus animales neutralizen!
L: Hey, Adia - Jorge dice Hola chica!
P: Pienso que es necesario para comer cierto
25 animales, pero es horible que gente mataron
los animales para sus "furs"
L: Saben que la organizacion, PETA hice?

Ad: Si. Estoy de auerdo. Recourdo el show "The
30 Price is Right"? Al fin de el show, cada vez,
Bob Barker dice "Recuerdo a tener su
mascoto Neutralizen!"
A: ew
35 P: Oi de PETA pero no se que hice
Ad: La semana pasada PETA tuvo un protest en
Pittsburgh, no?
Ad: Cuales son sus animales favoritos?
L: Es una organizacion que protege los derechos
40 de los animales. Trabajan conta experimenta
en los animales y conta mata los animales
para usar su "fur" solamente.

Like dogs and cats?
A: that's not fair
Ad: I think that many times animals on farms
Are not treated well
Ad: They put a lot of chemicals in the animals to
Make good meat.
L: Yes and people who have animals need
To have their animals neutered
L: Hey, Adia - Jorge says Hi Girl!
P: I think it is necessary to eat certain animals,
but it is horrible that people killed animals
For their furs
L: Do you know that the organization PETA
did?
Ad: Yes. I agree. I remember the show "The price
is Right"? At the end of the show, each time,
Bob Barker says "I remember to have your
pet neutered"
A: ew
P: I heard of PETA but I don't know what I did
Ad: Last week PETA had a protest in Pittsburgh,
didn't it?
Ad: What are your favorite animals?
L: it's an organization that protects the rights of
animals. They work against experiments on
animals and against kill animals to use their
fur only

The segment begins with Adia's solicitation of a topic of discussion (from paso 3 of the activity). The other learners immediately focus in on the topic and put forth their opinions on how animals are treated in society, and how they could be treated better. They remain on this topic throughout the episode, each contributing their ideas to it. Toward the end of the episode (line 37), the topic is brought to a more concrete level when a local example of treatment of animals is mentioned. Then in line 38, Adia asks what everyones' favorite animals are, which changes the focus of the discussion (after the segment is over).

This segment is similar to Segment D (Week Four) in that the communicators achieved such a level of intersubjectivity that they were able to coherently discuss the assigned topic at an academic level. They also met all of Habermas' validity claims. Indeed, the purpose of structured communicative tasks like this one is precisely to guide learners in developing a discussion like the one in this segment. However, as was seen in other segments, discussion of the structured activities did not always develop as was envisioned during the preparation of the activity. (This finding will be explained further in the discussion of task, Chapter 5.)

Summary of Episode Eight. The two segments from this week illustrate coherent dialogues of differing types. The first one was very informal and anecdotal. The second one was more formal and academic. In both of these conversations, however, the communicators achieved a state of intersubjectivity that enabled them to share a common perspective on the topic of discussion, and to explore each other's subjective realities. Although not all of the chat room conversations for this week were illustrated, the researcher observed that in all of these sessions, intersubjectivity was established and maintained throughout most of the entire session. Some sessions resembled Segment E (anecdotal) and some took shape more like Segment F (academic). Whenever the intersubjective state broke down, it was renegotiated and often reestablished. The discourse analyses in this episode, as well as the episodes before it, shed light on the shape of intersubjectivity in the L2 discourse in this study.

Off-task Discussion

In the section on intersubjectivity, it was seen that in every episode of Week One, Week Four and Week Eight, learners established task-centered intersubjectivity at some point, and in many cases maintained task-centered intersubjectivity for much or all of the duration of their electronic conversations. In several of the episodes, however, the learners decided to abandon the assigned topic/task for a significant amount of time. Thus, off-task discussion became one of the salient features of chat room interaction in this study. Off-task utterances occurred in every episode of this study. To qualify as "off-task discussion" in this analysis, the researcher set the criterion that the occurrences had to reach a quantity of more than five consecutive utterances unrelated to the assigned task. Table 4.1 summarizes the topics of off-task conversation in each of the nine episodes.

TABLE 4.1

Topics of Off-task Discussion

Episode	Assigned Topic	Off-task Topic	% of Episode
1C	freedom	weekend; England/Ireland	30%
2G	censorship	small talk	34%
3C	sexism	music	25%
4A	movies	small talk	15%
4C	movies	study abroad; TV	15%
5C	music	Halloween party	39%
5D	music	study abroad	27%
5E	music	movies	25%
6C	marriage	majors, residence, travel	38%
6F	marriage	small talk	15%
7A	family problems	small talk	14%
8A	animals	Thanksgiving; classes	43%
8C	animals	Thanksgiving; food	26%
8G	animals	Thanksgiving	48%
9C	the future	small talk	24%
9D	the future	parties	29%

Note. Percentages were calculated based on the number of off-task utterances divided by the total number of utterances in the episode.

Two patterns are immediately noticeable in the off-task discussion. First, the chosen topics of off-task discussion are those that learners apparently found interesting and that were of immediate importance to their lives. Five of the off-task discussions centered around what the researcher termed "small talk". Included in this category were topics such as other courses that the learners are taking (or talk about the Spanish course but not related to the current topic), their living situations, and their immediate past activities (last weekend, last summer) or immediate future plans (weekend, holidays, summer, the next school year). These topics were lumped together under the "small talk" umbrella because the conversation flowed from one of these topics to the next. Upon looking at the other categories, it can be seen that they are the same topics included in "small talk". The only difference is that the entire conversation focused on the listed topic, rather than flowing from topic to topic. It is particularly interesting that on Week Eight, the week before Thanksgiving vacation, three of the four off-task discussions focused on the Thanksgiving holiday.

The second pattern of interest concerning off-task discussion is that it was very often the same learners who engaged in it. Some of the 33 learners never strayed from the assigned topic/task. Some of the 33 learners did so in all or nearly all chat sessions. For example, Beatriz (initiated and) participated in off-task discussion in every chat session that she attended. (She was in Episodes 1C, 3C, 4C, 5C, 6C and 8C in table 4.1 above and was absent on Week Seven and Week Nine.) Her behavior seems to indicate that Beatriz had a different agenda for the discussion than did other learners who chose to remain on task all or most of the time.

A third finding regarding off-task discussion is that it always occurred when the instructor was not in the room. In fact, learners sometimes stayed on-task for as long as the instructor was in their room, and then went off-task immediately after the instructor left. Segment G illustrates this.

Segment G.

1 I: Continuen chicas, Ya regreso, voy a ver los otros cuartos	I: *Continue guys, I'll be back, I'm going to see the other rooms.*
<-<-< Instructor disconnected at 11:16	*<-<-< Instructor disconnected at 11:16*
B: adios	B: *bye*

5 B: bueno, ahora hablamos sobre de esta fin de semana	B: *well, now let's talk about this weekend*
B: alguien va al partido?	B: *is anyone going to the game?*

The discussion of weekend plans continues for another 40 lines, until one learner decides that it is time to get back on-task. A conflict is produced:

Segment H.

1 C: Pienso que necitamos que hablamos sobre de clase	C: *I think we need to talk about class*
B: NO!	B: *NO!*
B: la libertad para mi es dinero	B: *Freedom for me is money*
5 C: La profesora da malas notas	C: *The professor will give us a bad grade*
B: bueno, ahora, hablamos sobre otras cosas mas interesante	B: *well, now, let's talk about other more interesting things*
C: Por que dinero? Explicame.	C: *Why money? Explain to me.*
B: no, yo explico mas temprano	B: *no, I'll explain it earlier [later]*
10 B: no explico solament para ti	B: *I'm not explaining it just for you*
C: Pero no entiendo	C: *But I don't understand*
->->-> Instructor connected at 11:25	*->->-> Instructor connected at 11:25*
G: Yo no quiero pagar para la libertad.	G: *I don't want to pay for freedom.*
B: dinero = la libertad	B: *money = freedom*
15 B: es facil	B: *It's easy*

After being off-task for a while, Carmen (C) suggests that they return to the assigned task. Beatriz (B) responds with an emphatic NO! Beatriz then summarizes in one sentence all she has to say about the assigned topic, and indicates her desire to talk about something more interesting to her. Carmen tries two tactics to get back on-task. First, she expresses her concern that their participation grade will be lowered for being off-task. Then she pushes Beatriz to explain her statement that money equals freedom. Carmen tries to reestablish a new intersubjective state with Beatriz, but Beatriz refuses to accept the solicited topic of discussion. Carmen implores Beatriz one more time (line 11), stating that she does not understand (and implying that she wants to understand). Suddenly, the instructor reenters the room, and Beatriz holds on to the assigned topic, at least temporarily. As soon as the instructor leaves, however, the topic of conversation changes again.

<-<-<- Instructor disconnected at 11:29	<-<-<- Instructor disconnected at 11:29
B: yo quiero viajar a otros paises	B: *I want to travel to other countries*
C: Que paises?	C: *What countries?*
B: y cuidar para mis hijos	B: *and take care of my kids*
B: ingleterra	B: *england*
C: Me gusta ingleterra	C: *I like england*
B: ireland, no se como se dice	B: *ireland, I don't know how you say it*
B: si, yo tambien	B: *yeah, me too*
G: Me gusta bandas de iglaterra	G: *I like bands from egland*

As soon as the instructor leaves, the topic is changed. If Guajira (G) still desired to remain on-task, she would not have been able to do so because the other two interlocutors have entered into discussion of another topic. So Guajira follows the lead and joins the discussion.

During Week Two Beatriz attempted to initiate off-task discussion on three occasions, but her lead was not followed by her interlocutors, either at all or for very long. Segments I, J and K (from Episode 2G) demonstrate this.

Segment I.

B: quiero salir para mi casa	*B: I want to leave for home*
B: hoy es VIERNES!!!	*B: today is FRIDAY!!!*
G: podemos ir a paso 2?	*G: can we go to paso 2?*
C: si, pienso	*C: yes, I think so*
B: esoy de acuerdo	*B: I agree*

Beatriz initiates the topic of her weekend plans. Guajira does not follow the lead and instead proposes continuing to the next step of the activity. Since the other two communicators agree, they remain on-task. Later in the episode another off-task conversation is solicited, as illustrated in Segment J.

Segment J.

G: no tenemos oir(?) sobre los detalles de sus sexos	*G: we don't have to hear (?) The details of their sexes*
S: Que	*S: What*
B: Yo tengo una vida sexa bueno	*B: I have a good sex life*
S: Tambien yo	*S: Also I*
G: tambien	
M: Yo no tengo ningun comento	*M: I have no comment*
C: Si, pero la Casa Blanca es de la gente de los estado unidos.	*C: Yes, but the White House is of the people of the united states*

In the midst of a discussion of President Clinton and the Monica Lewinsky scandal, Guajira comments that it is not necessary for people to know the details of the President's sex life. Beatriz interjects a comment on her own intimate life, with which the interlocutors agree, but then the conversation is quickly brought back to the original topic. Later, however, Beatriz tries one more time to go off-task. Segment K shows how this solicitation is handled.

Segment K.

B: mambo #5, buena cancion	*B: mambo #5, good song*
G: nononono	*G: nononono*
I: Que programas te prohibian ver tus padres? Carmen	*I: What programs did you parents forbid you to see? Carmen*
B: no te gusta esta cancion?	*B: don't you like this song?*
I: Que cancion es... La que dice Mambo, que rico el mambo, Mambo que rico es es es	*I: What song is it...The one that says, "Mambo, how great the mambo, Mambo how great it is it is it is*
G: Mis padres prohibian los telenovelas con mas sexo/romanca	*G: My parents forbid soap operas with more sex/romance [incorrectly rendered]*
B: mambo numero cinco	*B: mambo number five*
I: Con sexo y romance?	*I: With sex and romance?*

During an on-task discussion, Beatriz interjects that "Mambo #5" is a good song. Guajira disagrees. The instructor asks a questions to keep the learners on-task. Beatriz continues with her preferred topic but nobody follows her. The instructor asks Beatriz what song she is talking about, but then Guajira and the instructor immediately go back to the original topic.

Thus far it has been seen that off-task discussion is triggered instantly, usually when the instructor is not present and when one interlocutor decides to abandon the assigned topic for another, more interesting one. As Larsen-Freeman (1980) pointed out, discursive behavior of one interlocutor assigns certain communicative roles to the other interlocutors. Therefore, when one person solicits off-task discussion, the off-task discussion only occurs if the interlocutors follow the lead of the solicitor. This produces one of three results, each of which has been illustrated above. First, the interlocutors can follow the lead of the solicitor and move into off-task discussion, as in Segment G above. Alternatively, the interlocutors can remain on-task and the solicitor either becomes obligated to or agrees to remain on-task as well (perhaps after numerous attempts to stray from the task/topic), as in Segments I and K above. Finally, a disagreement can take place about whether to remain on-task or go off-task (as in Segment H). Eventually the disagreement has to be resolved in favor of either off or on-task discussion.

In Episode 8A of the chat transcripts another interesting initiation of off-task discussion occurred. Segment L demonstrates this.

Segment L.

1	I: Bueno chicos. Me bvoy para otro cuarto. Hasta luego.	*I: Well guys. I'm going to another room. See you later.*
	C: adios.	*C: Bye.*
	R: hasta luego	*R: see you later*
5	C: bien.	*C: Good.*
	C: que quieres hablar sobre?	*C: what do you want to talk about?*
	E: no animales. esta aburrido	*E: not animals. It's boring.*
	R: Que te parecen como nosotros gastamos mas en comida para las mascotas que en comida	*R: What do you think how we spend more on food for pets than on baby food?*
10	para los bebes	
	C: si, si, si.	*C: yeah, yeah, yeah*
	R: si esta tema es muy aburrida cambiamos al otro	*R: yes this topic is very boring let's change to another*
	C: si,	*C: yes*
	C: que tema?	*C: what topic?*
15	R: cualquiera	*R: whatever*
	E: escuela?	*E: school?*
	C: como se dice thanksgiving?	*C: how do you say thanksgiving?*
	R: dia de gracias	*R: 'dia de gracias'*
	C: A mi me gusta el dia se gracias.	*C: I like thanksgiving*

As is the usual pattern, off-task discussion is solicited as soon as the instructor leaves the room. In line 6, Carlos (C) asks what his fellow chatters would like to talk about, instead of initiating the off-task topic himself. Enitza (E) states her desire to move off of the animals topic. Rosario (R) puts forth an on-task statement, which she had probably begun to type before the topic change was suggested. In lines 12-14, they are all in agreement to change the topic. Rosario suggests talking about school. Carlos suggests talking about Thanksgiving, which they do after the episode ends. What is interesting about this exchange is that all of the learners recognized that it was difficult for them to discuss the given topic, and they collectively negotiated a topic that would work for them. In other words, they took possession of their chat room environment and developed their own topics as a way to continue conversing in Spanish, but about topics that interested them.

Summary of Off-task Discussion

Although many of the groups remained on-task for the duration of their chat sessions, 16 out of 65 conversations (approximately 25%) contained a significant amount off-task discussion. Off-task discussion manifested several patterns. First, it was very often the same learners who initiated and engaged in it from week to week. Second, it almost always occurred when the instructor was not in the room. Third, the chosen topics of off-task discussion were topics that interested them more at the moment than the assigned topic. Finally, there were some patterns of initiation and maintenance of off-task discussion that were illustrated through discourse analysis. Engaging in off-task discussion seems to have been a meaningful and intentional activity for these learners, representing one of the ways in which they transformed the chat rooms into a discourse community governed by learner communicative autonomy.

Social Cohesiveness

Chun (1994) reported that her learners performed a wide range of interactional speech acts in chat rooms, including everyday social encounters such as greetings, leave takings, and the use of polite formulas. In the current study, language functions such as these occurred very frequently. While Chun reduced such language functions to "minimal sociolinguistic competence", this type of phatic language use was a fundamentally important part of the chat discussions in this study in that it allowed learners to share their feelings and to demonstrate a sense of sociability. In other words, phatic language use helped learners to construct what Meskill (1999) refers to as a *community of learners*, and similar to what Wenger (1998) calls a *community of practice*. In Wenger's view, learning is largely a function of social participation in communities of practice. "Participation here refers not just to local events of engagement in certain activities with certain people, but to a more encompassing process of being active participants in the *practices* of social communities and constructing *identities* in relation to these communities" (Wenger, 1998, p. 4). This section will illustrate the learners' communicative behaviors which lead to building communities of (Spanish chat room) practice.

Greeting and Leave-taking

In many of the episodes the learners (and the teacher when she was present) spent a significant amount of time greeting each other and talking about their current state of being or activities of importance to them, before beginning their assigned task. Such conversation was not labeled by the researcher as off-task discussion, since the tasks had not officially begun and since this type of discussion appeared to serve a social purpose other than avoidance of the assigned task. Segment M is an example of greeting talk.

Segment M.

A: Hola Mario, como estas hoy?	*A: Hi Mario, how are you today?*
M: Hola Amparo. Estoy muy bien. Y tu??	*M: Hi Amparo. I'm fine. And you??*
A: mmm....estoy asi asi	*A: mmm. I'm OK*
M: Que paso en tu vida? Cualquier interesante?	*M: What happened in your life? Whichever interesting?*
A: es viernes, pero no puedo salir este noche, porque tengo demasiado mucho tarea	*A: it's Friday, but I can't go out tonight, because I have too much much homework*
A: :-(	*A: :-(*
I: Hola como estan? que hay de nuevo?	*I: Hi how are you? what's new?*
A: fui a ver Dracula anoche	*A: i went to see Dracula last night*
I: Amparo estas contenta?	*I: Amparo are you happy?*
A: Estoy asi asi	*A: I'm OK*
M: Lo siento Amparo....Como fue la ballet?	*M: I'm sorry Amparo...How was the ballet?*
A: Fue bueno	*A: It was good*
A: Me gusta mucho a Renfield	*A: I like Renfield a lot*
I: Ampero, A que ballet fuiste?	*I: Ampero, What ballet did you go to?*
M: Me gusta la ballet, pero a veces The Pittsburgh Ballet no baila bien!	*M: I like ballet, but sometimes The Pittsburgh Ballet doesn't dance well!*
A: Fui a Dracula	*A: I went to Dracula*
A: si! es la verdad	*A: yes! It's the truth*
I: Te gusto?	*I: Did you like it?*
A: Si, me gusta	*A: Yes, I like it*
M: Recuerdaste quien bailo la primeras partes?	*M: Did you remember who danced the first parts?*
I: A mi tambien me gusta EL ballet, pero prefiero la danza moderna...	*I: I like ballet too, but I prefer modern dance...*
A: ummm...recuerdo caras pero no nombres...lo siento	*A: ummm...I remember faces but not names...I'm sorry*
A: tengo la programa en mi casa	*A: i have a program at my house*
I: Tienes El programa de Dracula?	*I: Do you have the program of Dracula?*
A: si, en mi casa	*A: yes, at my house*
M: Ahhhh.....Cree que fue el ballet aqui en Pittsburgh.....Tienen sus libros?	*M: Ahhh...[?] think it was the ballet here in Pittsburgh...Do you have your books?*
I: Mario, ?recuerdaste?	*I: Mario, you remembered?*
A: ?	*A: ?*
I: Como se dice "recordar" en preterito?	*I: How do you say "to remember" in the preterit?*
M: Si, recorde(?) mi libro.	*M: yes, I remembered (?)my book.*

I: Se dice "recordaste". Bueno, empecemos con los pasos...	*I: You say "you remembered". Well, let's start the steps...*

After Amparo (A) and Mario (M) greet each other, Mario asks Amparo what is going on in her life. The instructor enters and also asks how the learners are doing. Amparo shares that she is a little unhappy about having to stay in on a Friday night and do schoolwork, but adds that she saw the Dracula ballet. The interlocutors spend several lines talking about this event, until finally the instructor suggests that they begin their activity.

Many of the episodes begin with this sort of lengthy greeting and small talk before learners begin their assigned tasks. In very few episodes did the learners begin the tasks immediately. It appears, then, that getting sufficiently acquainted with each other each week is an important part of building their discourse community in the chat rooms. It may even help them to subsequently achieve intersubjectivity with each other, since intersubjectivity is a function of sharing the same background information and of being able to put oneself in the perspective of the interlocutor(s).

In some of the episodes the leave takings were rather elaborate as well. Segment N shows one of these.

Segment N.

J: tienen un buen dia....	*J: have a good day*
J: chao	*J: bye*
Is: pienso que es todo para hoy	*Is: I think that is all for today*
J: si	*J: yes*
Is: adios...	*Is: bye*
P: si, hasta luego	*P: yes, see you later*
I: Que tengan buen fin de semana	*I: Have a good weekend.*
A: Me gusta hablar con Uds. Adio	*A: I like talking to you. Bye.*
Is: si y ud tambien	*Is: You too*
Is: yo tambien	*Is: Me too.*

All of the interlocutors bid the others farewell in a more elaborate way than simply saying "adiós". Isabel (Is) initiates the leave taking by stating that they are out of time. Javier (J) and the instructor (I) both wish the others a nice weekend, and Adia (A) expresses her enjoyment of having chatted with everybody. In short, the interlocutors make their exit from the conversation in a way that maintains the type of social cohesion that is found throughout most of the episodes. They employ their developing L2 sociolinguistic competence in maintaining the social cohesiveness that they establish from the beginning of their conversations.

Use of Humor

In addition to greetings and leave takings, social cohesiveness is evident in other parts of the chat room conversations. In some of the episodes the learners and the instructor engaged in various forms of humor, such as teasing and joking with each other. Sometimes the jokes were one-liners, such as during a conversation about animals in Week Eight, in which one learner says "Tengo un gato y un novio" (*I have a cat and a boyfriend*). At other times the joking occurred over several turns of conversation and involved most or all of the group, as in Segment O and Segment P.

Segment O.

1	P: Las chicas son buenas para tres cosas...	*P: Girls are good for three things...*
	Y: cuales son?	*Y: What are they?*
	P: cocinar, limpiar, y hacer bebes	*P: Cooking, cleaning and making babies*
	E: el sexismo va a existar siempre	*E: sexism is always going to exist*
5	Y: estas serio, pico?	*Y: are you serious Pico?*
	E: tipical	*E: typical*
	N: Pico, eres uno de dos hombres en este clase, no es dificil saber cual eres	*N: Pico, you are one of two men in this class, it's not difficult to know which one you are*
	Y: jeje	*Y: hehe*
10	E: pico, eres en un cuarto con tres chicaa ! tenga cuidad	*E: pico, you're in a room with three girls! be careful*
	P: no me importa	*P: I don't care*
	Y: si, ten mucho cuidado	*Y: yeah, be very careful*
	P: que van hacer?	*P: what are you going to do?*

In the midst of a conversation about sexism, Pico (P), who is the only male in the group, puts forth a sexist remark. It is, of course, possible that what he expresses in this segment are his true opinions, but looking at the entire episode from which the segment came, it can be seen that Pico is in a playful mood today. It appears that he is taking advantage of his being the only male in the room, to be playful with his female interlocutors. This type of joking also occurred among learners and the instructor, as is shown in Segment P (from Episode 4B).

Segment P.

I: Ya vi que Jorge escribio solo porque yo entre aqui.	*I : I saw that Jorge wrote just because I came in here.*
J: mire..... mujeres.... " not fair."......	*J: look....women.... "not fair"....*
A: Pero el pelicula es sobre mas. Es dificial a explicar.	*A: But the movie is about more. It's difficult To explain.*
I: De que pelicula estan hablando chicos?	*I: What movie are you talking about guys?*
J: como se dice" ganging up on the man... es sexismo.... tambian	*J: how do you say "ganging up on the man"...it's sexism...also*
I: y jorge...cual es su pelicula favorita?	*I: and Jorge...what is your favorite movie?*
A: "Cookie's Fortune." Has visto?	*A: "Cookie's Fortune." You have seen?*
I: no jorge...nosotros no "gang up" en tu	*I: no Jorge...we are not "gang up" on you*
J: si yo creo estan sexistas....	*J: yes I think you're sexists*
I: dios mios!! no estan sexistas	*I: my Gods!! they're not sexists*
I: En espanol decimos, "caerle encima a una persona", en este caso Jorge	*I: In Spanish we say, "to gang up on", in this case Jorge*
J: especialmente la professora.....	*J: especially the professor*
I: Yo no. FALACIAS	*I: Not me. Lies.*
J: con su lentes nuevas	*J: with her new glasses*
J: que signafica "falacias"	*J: what does "falacias" mean?*
J: false?	*J: false?*
I: si que significa	*I: yes it means that*
J: phalic?	*J: phalic?*
I: Vieron!!! Ahora la profesora esta mas seria con los lentes. "Falacias" significa "Mentiras"	*I: Did you see!!! Now the professor is more serious with her glasses. "Falacias" means "Lies"*
J: si, y mas bonita	*J: yes, and prettier*
J: ya ya ya	*J: ya ya ya*
I: Bueno, seriedad!!! Ustedes vieron The Full Monty?	*I: OK, let's get serious!!! Did you see The Full Monty?*

The instructor teases Jorge (again, the only male in the room) and he teases her as well. In the process, the group refers back to a previous chat room discussion on sexism, and the instructor has an opportunity to teach them a new expression in Spanish ("gang up on"). Jorge continues to tease the instructor about her new glasses, and finally the instructor ends the teasing episode with a request to get back on-task.

The use of humor and teasing has a potential to develop strong positive and negative feelings. The humor that occurred in the above two segments contributes to the social cohesiveness of the chat room environment, and thus nourishes the community of learners. It is also noteworthy that the humor occurred almost entirely in Spanish (i.e., with very little resorting to English). When learners engage in speech events such as teasing and joking, they have an opportunity to expand their sociolinguistic competence in their L2.

Identity/Role Play

In the previous section it was illustrated that communicative behaviors such as joking and teasing contributed to the social environment of the chat rooms. The learners at times also engaged in role playing and took on new identities in their chat room conversations. Two of the female learners adopted masculine names for their chat pseudonyms (Mario and Paco). While Paco never assumed a masculine role in the conversations, Mario did. In the first episode, for example, Paco stated that she was tired ("Estoy cansada") using the feminine form of the adjective, which immediately gave away her identity. Also, in the third week, when the topic was sexism, she took on a very pro-female stance. Mario, however, acted the opposite. In the first episodes, whenever she referred to herself using an adjective such as "*tired*" in Spanish, she used the masculine ending ("Estoy cansado"). In the first episode she corrected another learner who asked her, "Por que estas cansada", using the feminine ending. In the sexism discussion, she took on a very neutral role, not revealing her true female identity. She maintained her male identity throughout the chat sessions, using male adjectives to refer to herself, although not adopting any obviously male points of view. Mario's maintenance of a male identity had not only social but also linguistic ramifications. It forced her to pay close attention to gender of nouns and adjectives in Spanish morphology, which she did consistently throughout the study.

Beyond the adoption of particular pseudonyms, some learners also engaged in role plays throughout their chat sessions. Segment Q, from Episode 1A, illustrates one of these role plays.

Segment Q.

M: Javier tiene un hermana que se llama Jennifer?	*M: Javier do you have a sister named Jennifer?*
J: Si	*J: Yes.*
M: bueno	*M: Good*
J: ella es una cantante de puerto rico	*J: she is a singer from puerto rico*
J: tambien actriz	*J: also actress*
P: que guay	*P: how nice*

M: si conozco, y una actor	*M: I know, and an actor*
J: actora	*J: actor [means to say "actress"]*
M: si	*M: yes*
J: esuve en nueva york la semana pasada con ella	*J: I was in new york last week with her*
J: estuve	*J: i was [spelled correctly this time]*
P: no entiendo quiero hablar sobre mexico	*P: I don't understand I want to talk about Mexico*
P: teniste el sexo con ella	*P: doed you have sex with her*
M: En mexico hay siete congresos o asambleas? Interesante, No?	*M: In Mexico there are seven congresses or assemblies? Interesting? Isn't it?*
J: Pablo yo soy el hermano	*J: Pablo I am the brother*
P: lo siento pero ella tiene un cuerpo	*P: I'm sorry but she has a body*
J: Ojo estas hablando de mi hermana	*J: Be careful you are talking about my sister*

Mía (M) initiates the opportunity for Javier's (J) role play by asking if he has a sister named Jennifer (López - the currently famous Puerto Rican singer). Javier then enters into his role play and adds that he has just spent time with his sister in New York. Pablo (P) does not initially enter the role play conversation. But then she decides to take the role play a step further, asking if Javier had sex with Jennifer. Javier reminds Pablo that Jennifer is his sister, which Pablo brushes off as if it doesn't matter. In Segment R, taken from Episode 2C, a similar role play takes place.

Segment R.

B: selena viva!!	*B: selena alive!!*
G: yay selena!	*G: yeah selena!*
S: Calmadas porfavor, Orita estoy trabajando en un nuevo cancion.	*S: Calm please. Right now I'm working on a new song.*
B: haha	*B: ha ha*
B: bueno	*B: good*
M: bidi bidi bam bam	*M: bidi bidi bam bam*
C: Mi padre ama Selena	*C: My father loves Selena*
M: ahh, bueno	*M: ahh, good*
B: me gusta su cancion antes de muertes	*B: I like her song before deaths*
M: Este conversacion es muy interesante]	*M: This conversation is very interesting]*
B: si	*B: yes*
S: Tambien tengo una nueva linea de ropa.	*S: I also have a new line of clothing.*
B: haha, me gusta ropa	*B: haha, I like clothing*
B: pero, me gusta ropa que cubrir mi cuerpo	*B: but, I like clothing that covers my body*
M: Selena, nos tenemos lo mismo apeido	*M: Selena, we have the same last name*
S: QUe bien, te voy ayudia con un vestido	*S: Great, I'm going help you with a dress*

As in the previous segment, the interlocutors initiate the role play for Selena (S), which is also the name of a famous Mexican American singer who had been killed recently. Selena follows along with her comment about working on a new song. María (M) types the words to one of Selena's favorite songs and Carlos (C) adds that his father really likes Selena. When Selena refers to her new line of clothing, Beatriz (B) adds that she likes clothing that covers her body. This comment must be referring to the attire of the singer. After this segment the learners returned to serious conversation of the assigned topic. The role play provided learners with the chance to talk about a famous Spanish-speaking person, as well as to enjoy themselves in their chat session.

Sarcasm/Insults

While there were many instances of joking and teasing in the chat sessions in this study, there were also instantiations of sarcasm and insults. Segment S, taken from Episode 1A, shows one of these occurrences.

Segment S.

1	I:	Bueno, Que paises quieren leer?	*I:*	*OK. What countries do you want to read?*
	M:	Quiero leer Mexico	*M:*	*I want to read Mexico.*
	P:	estoy leeyendo sobre mexico	*P:*	*I'm reading Mexico*
	J:	Venezuela	*J:*	*Venezuela*
5	P:	no	*P:*	*no*
	P:	no	*P:*	*no*
	P:	no	*P:*	*no*
	M:	si si	*M:*	*yes yes*
	J:	Okay CUBA	*J:*	*Okay Cuba*
10	I:	No que? Pablo o Si que Mia?	*I:*	*NO what? Pablo or Yes what Mia?*
	M:	no tengo mexico	*M:*	*I don't have Mexico*
	M:	Pablo no tiene	*M:*	*Pablo doesn't have*
	P:	nosotros las dos pueden tener mexico.. no hay una regala	*P:*	*we both can have mexico.. There's no rule*
15	P:	bien?	*P:*	*OK*
	P:	estas contenta	*P:*	*are you happy*
	M:	contenta como te dices?	*M:*	*happy how do you say to yourself?*
	P:	no lloras	*P:*	*you don't cry*
	J:	lo siento	*J:*	*I'm sorry*
20	P:	lo siento	*P:*	*I'm sorry.*

When Mía and Pablo both wish to discuss the constitution of Mexico, Pablo begins to get difficult with Mía. In lines 5-7, she limits her disagreement to saying "no". By line 14, however, she becomes aggressive with Mía, stating that there is no rule that says they can't both work with the Mexican constitution. Then she sarcastically asks Mía if she is happy and tells her not to cry. Javier is caught in the middle and seems to be confused, perhaps thinking that they all needed to decide on one constitution. In Segment T, taken from Episode 2C, a similar situation takes place.

Segment T.

B: no me gusta el libro de esta clase	*B: I don't like the book for this class*
B: es estupido	*B: it's stupid*
G: Que te parece?	*G:* Que te parece? *(What do you think?)*
B: si, que libro otro?	*B: yes, what book other?*
B: duh	*B: duh*
B: me enojada Guajira	*B: me angry Guajira*
G: de nada	*G: [you're welcome/it was nothing]*
M: mi tambien	*M: me too*
B: diez minutos mas	*B: ten more minutes*
C: Cuando es la vida privada del individuo mas importante que el deseo del publico a ser informado?	*C: When is the private life of the individual more important than the desire of the public to be informed?*
G: si, si!	*G: yes, yes!*
B: no me importa	*B: I don't care*
I: Hola, chicos, como estan? En que paso estan?	*I: Hi, guys, how are you? What step are you on?*
B: no me gusta Guajira	*B: I don't like Guajira*

Unlike the previous segment, the "victim" did not appear to do anything to provoke Beatriz's (B) aggression. It is true that there was only one textbook for the class, so there could be no confusion as to which book Beatriz was referring to. However, Guajira (G) doesn't appear to intend to argue. In fact, she puts forth the mitigating remark "de nada" and attempts to get back to constructive conversation. When Carlos (C) enters a comment referring to the assignment, Guajira agrees with him and Beatriz says she doesn't care. When the instructor enters the room, Beatriz tells her that she does not like Guajira. Segment U illustrates one more example of learners exhibiting rudeness to other learners in the chat rooms.

Segment U.

P: Describe tu mujer ideal	*P: Describe your ideal woman*
P: Describa. Javier..	*P: Describe. Javier..*
P: creo que tienes miedo de una mujer quien es mas inteligente que tu	*P: I think you are afraid of a woman who is more intelligent than you*
J: alta, muy bonita, innocente,inteligente,	*J: tall, very beautiful, innocent, intelligent*
P: innocente???? quieres tener mas experienca ded ella	*P: innocent???? you want to have more experience than her*
P: de	*P: than*
J: si	*J: yes*
J: por que no	*J: why not*
P: porque quieres creer que eres el rey	*P: because you want to believe you're the king*
P: el rey de la cama	*P: the king of the bed*
J: si senor	*J: yes sir*
J: que paso con Alicia	*J: what happened to alicia*
J: por que no hablas alicia	*J: why don't you talk alicia*

P: tienes miedo cuando una mujer tiene el control	*P: you're afraid when a woman has control*

Immediately before this segment, the group was discussing a fairy tale which they had read in preparation for the chat session. The fairy tale brought up issues of male-female relations. Pablo (P) began to question Javier (J) about what he looks for in a female. During the segment, it appears that Javier cannot say anything on the topic which is acceptable to Pablo. Pablo makes assumptions about Javier's comment and belittles him for them. It appears that the assigned topic (sexism) is a sensitive one for Pablo. Alicia (A) apparently does not know what to say during this episode, and Javier calls on her to enter the conversation to save him from Pablo's attack. In Segment V, Pablo makes a cyber attack on another learner, but with different results than in Segment U.

Segment V.

P: me gusta tori amos y los indigo girls	*P: I like tori amos and the india girls*
PL: bah	*PL: bah*
P: jodate	*P: fuck you*
N: no, no deseo	*N: no, I don't want*
J: ninos por favor no usan malas palabras	*J: kids please don't use bad words*
P: me gusta tu mama	*P: I like your mama*
PL: esta bien	*PL: that's OK*
P: tu eres muy extrano Pico	*P: you're very strange Pico*
PL: me come	*PL: you eat me*

Pico (PL) indicates his disagreement with Pablo's choice of good music groups. Although his comment ("bah") is rather mild, Pablo (P) responds with an expletive. Natalia (N) and Javier (J) interject mitigating comments, but Pablo continues to insult Pico. Unlike Javier, however, Pico decides to return the verbal attack with a comment that temporarily ends the incident. A short while later, however, another round of insults emanate from Pablo, as shown in Segment W.

Segment W.

P: vi bob dylan y paul simon, tom petty, yes (tres veces), allman brothers durante el verano pasado y roger waters de pink floyd y rusted root	P: *I saw bob dylan and paul simon, tom petty, yes (three times), allman brothers last summer y roger waters of pink floyd and rusted root*
J: Pablo mentirosa	*J: Pablo liar*
P: Quieres preguntar a mi madre	*P: you want to ask my mother*
J: Si	*J: Yes*
J: donde estas tu mama	*J: where are you your mom*
P: no me gusta los barenakedladies	*P: I don't like barenakedladies*

PL: el grupos o mujeres desnudos	*PL: the groups or naked women*
P: puedo darte su numero de telefono puta	*P: I can give you her phone number bitch*
P: tu no me sabes. cierra la boca mentiroso	*P: you don't know me. Shut your mouth liar*
J: AH Okay por favor ninos obstena de usar palabras malas. Cuanto vezes tengo que decirlo	*J: AH Okay please kids abstain from using bad words. How many times do I have to say it?*

Javier, perhaps jokingly, calls Pablo a liar. Pablo asks Javier if he would like to ask her mother for verification, and then adds that she does not like the group the "Barenaked Ladies". This time Pico jokes with Pablo, asking her to clarify if she means the group or nude women. Pablo then sees that Javier wishes to pursue the verification with her mother, and she launches another verbal attack on Javier.

Segments S-W illustrate what is commonly referred to in Internet language as *flaming*. Flaming is electronic discourse characterized by inappropriate or excessive emotionalism, bluntness, or hostility (Sproull & Kiesler, 1991). It is believed that flaming is a very frequent Internet phenomenon, and that aggression in general is higher online than off (Wallace, 1999, p. 111). It is likely that not knowing who the interlocutors are contributes to this high amount of flaming, however the mere fact that the communicators are not in a face-to-face situation (even if each knows who the others are) may be enough to encourage flaming. In other words, people may less inhibited in insulting others when they are hidden behind their computers than when they are in a face-to-face situation. One researcher working with college English composition students noted a great deal of cursing among the students, which he called a "tidal wave of obscenity and puerility" (DiMatteo, 1990). Although flaming may not be the most desirable communicative behavior in academic discourse, the occurrence of flaming in this study seems to constitute yet another way that learners transformed the chat room environment into a place that they could use their L2 in new and autonomous ways.

Use of English

Another outstanding feature of the chat room interaction in this study was the lack of use of English. Both learners and instructor maintained Spanish as the language of communication throughout the nine chat sessions, with few exceptions. When English was invoked, it was almost always to express an unknown lexical item in Spanish. This was almost always done by stating the entire sentence in Spanish but placing the unknown word in parenthesis in English, for example, “es una ‘*guess*’”, “...mirar a un ‘*website...*’”, “...las programas son ‘*fake.*’” English was also used to clarify a word or expression in Spanish when the meaning was less than clear. Some examples of this are: “que es ‘violada’? *rapist or victim*?”, “que significa ‘amenazar’? *threatened*?”. Finally, English was occasionally used to give instructions for the task at hand. For example, “*ok go to file and click on choose new window*”, “el instructor dice ‘*you should stick to the lesson plan*’”.

It appears that when English was used, it was for the purpose of efficiently maintaining conversation in Spanish. This may sound like an oxymoron, but upon further analysis it seems to be a plausible explanation for the use of English in this study. For example, many of the English lexical items that were used in the chat sessions contained subtle semantic concepts that the learners would not have been exposed to in their L2. Words used in this study such as “*overblown*”, “*kinky*”, “*yuck*”, and “*old boy network*” represent non high-frequency lexical items that are not part of common, everyday speech, and which the learners are therefore not likely to know in their L2. In order to express the meanings of these words, the learners could either attempt to circumlocute in Spanish or to use the word in English and continue the conversation. The latter option is undoubtedly more efficient. The same is the case for the instructions that were given in English.

The use of the L1 in L2 classes is a debated issue in foreign language methodology. Many advocates of communicative language teaching would not condone any L1 use in the L2 class, believing that L2 learners need as much exposure and practice as possible within a solely L2 context. The L1 could also be viewed, however, as a semiotic tool which can be strategically employed to maintain communication in the L2, when the interlocutors all know both the L1 and the L2. In other words, it is much easier to say a word in English and to continue the conversation in Spanish than to spend a long time trying to explain a concept in Spanish and still not getting the exact meaning across. The L1 is a part of the learners’ linguistic repertoire, and thus the invocation of the L1 as a semiotic tool is consonant with a sociocultural view of L2 learning. As a communication strategy, the L1 use can also be overused to avoid attempting to express ideas in the L2. In this study that does not appear to be the case. With minimal use of English these learners were able to maintain fifty minutes of electronic conversation almost exclusively in Spanish.

Discussion

This chapter employed discourse analysis as an analytical tool to explore the communicative nature of the chat room environment which was the object of this study. The chapter began with an exploration of intersubjectivity, a concept that is of current interest to sociocultural SLA scholars who seek to observe and explain language use and development as it is discursively constructed in collaborative dialogue. A shared framework of understanding must be established in order for collaborative discourse to take place. Collaborative discourse is believed by Vygotskian SLA theorists to be a crucial locus of language development. Therefore, it is theoretically interesting to explore the presence or absence of intersubjectivity in L2 discourse. Additionally, the object of study in this research project is L2 discourse in a new, electronic medium, rather than that of face-to-face conversation. The electronic medium provides a unique communicative environment which needs to be thoroughly examined if it is to be utilized in foreign language instruction. In this study intersubjectivity served as a useful construct to illuminate the nature of collaborative discourse in the chat room environment.

Recently in the sociocultural SLA literature, the intersubjectivity construct has been used to illustrate how learners build a shared framework of understanding within a communicative task in the classroom (Antón & DiCamilla, 1998). There is a concern among some sociocultural SLA theorists that the intersubjectivity construct may be operationalized too loosely in this research context, radically transforming the construct from its original conceptualizations by theorists like Habermas and Rommetveit (Sociocultural Theory and Second Language Learning Conference, October, 1999, Philadelphia). Achieving intersubjectivity implies more than mere agreement on how to carry out a communicative task. Although agreement on how to carry out a task may be necessary to successfully complete the task, the achievement of intersubjectivity involves not only such agreement, but also a joint understanding of what interlocutors say and how what they say fits into the established communicative context. This is what theorists such as Habermas and Rommetveit mean by "shared social worlds".

In a sociocultural view of L2 learning, language development occurs as a result of learners' active engagement in collaborative discourse. For collaborative discourse to be useful for language learning, it is necessary for the interlocutors to achieve a joint understanding. It is under this condition of joint understanding that interlocutors co-construct meaning with each other. Achieving intersubjectivity also activates the ZPDs of learners, which is considered by sociocultural theorists to promote language development. The intersubjectivity construct was of particular importance in this study in that it enabled the researcher to uncover the mediational nature of both the L2 and the chat room environment as communicative tools. In their weekly chat sessions, learners demonstrated the ability to achieve and in many cases, maintain intersubjectivity in their L2 and in a new communicative environment that is qualitatively different from classroom interaction. The tasks assigned to the learners involved engaging in extensive chat room discourse, during which they simultaneously used the L2 as mediator of their chat room communication, and chat room communication as mediator of their L2 language use (and perhaps development).

Chat rooms, just like L2 classrooms, present their own set of circumstances (i.e., benefits and drawbacks) for communication. First, there is no non-verbal communication in chat rooms (except for emoticons), since interlocutors do not see each other while they are chatting (unless they happen to be in the same room and look at each other). Also, since there is no control over when the communicators enter utterances into the conversation and what they enter, several strands of conversation often occur simultaneously. It can be challenging to converge these strands of conversation into one topic within which all interlocutors can achieve intersubjectivity with each other. The discourse analyses performed in this study revealed that learners in these intermediate Spanish classes successfully appropriated the chat room medium in order to achieve and maintain shared states of understanding with each other, which in turn enabled them to sustain 45-minute discussions in their L2, with or without the presence of the teacher.

As the discourse analyses above demonstrated, states of intersubjectivity take on different shapes throughout the 45-minute discussions. Beyond the mere attainment of shared perspective or understanding regarding the topic and task at hand, there is the issue of "simple" versus "academic" content of discussions. In the segments that were illustrated in this chapter, some differences were pointed out in the content of the discussions. For example, in many of the episodes on movies, learners did not move far beyond the mere mention of their favorite movie and a one-line description of the plot or the reason they liked the movie. A favorable condition for the development of linguistic competence or fluency, especially at the intermediate level of L2 study, is that learners move beyond "simple" communication about the immediate context (Givon, 1979). When learners move into less obvious contexts, it becomes more challenging for them to establish a shared social world, or intersubjectivity. In many, but not all, of the chat sessions in this study, learners expanded their "here-and-now" intersubjectivity to include discussion of concepts and ideas that were beyond the tangible, everyday aspects of their lives. This is not to say that chat room conversation *caused* learners to enter this level of conversation, but it was shown in this study that the chat room medium is a robust research environment that provides researchers with tangible evidence to employ in the analysis of learner L2 communication.

The discourse analyses presented in this chapter also revealed the many ways in which learners took ownership of the chat room context and utilized it to create their own community of language practice. This community of language practice was characterized by discussion of topics of mutual interest, social cohesiveness and group belonging, joking, teasing, and even insulting. In their community of language practice, learners enjoyed a high degree of communicative autonomy, which is not often afforded to learners in the typical L2 classroom. Communicative autonomy seems to be an overarching theme within this community of practice in the chat room environment.

Communicative autonomy first became apparent in this study from transcripts of the earliest chat sessions, in which it was clear that the instructor's role was that of conversation partner, rather than authority figure. In L2 classrooms, instructors are used to controlling discourse with learners, often implementing a pattern of communication referred as IRE (e.g., Johnson, 1995). In the IRE sequence, the instructor initiates a question, a learner answers the question, and the instructor evaluates the learner's answer. In the chat room context the instructor becomes only one voice of many, and as such, her role as discourse controller is diminished significantly. It appears that many of the learners picked up on this dynamic quickly, utilizing their autonomy in the chat room to take their discussion in directions that interested them. In this way, the typical IRE pattern of classroom discourse was transformed as learners initiated their own questions to both the teacher and to each other, and were not controlled by teacher questioning and evaluation.

Unlike the learners who recognized and took advantage of their communicative autonomy, other learners seemed to view the chat room as an extension of the classroom context, with the same behavioral norms as in the classroom. These learners remained on-task for the duration of most or all chat sessions in the study, following methodically most or all of the assigned subtasks (when subtasks were assigned). They also tended to focus more on correct language form than learners who were more interested in free-flowing communication.

Another characteristic of the community of language practice created by the learners in this study was that of off-task discussion. One fourth of the chat episodes included a significant amount (15% to 48%) of off-task discussion. Some learners chose to talk about more academic topics, such as study abroad plans or world cultures. Other learners preferred to discuss nonacademic, everyday topics, such as weekend plans. Especially when the instructor was not in the room, learners often took advantage of their autonomy and shaped their community of practice in a way that was more suitable to them. As in any community of persons who continually interact with each other, sometimes a clash of preferences provoked conflict among some of the learners in the chat rooms. Some learners wished to discuss the assigned topic while others wished to discuss their own topics. Indeed, the nature of chat room communication, in which the communicators are not bound to the same norms of coherent conversation as in face-to-face conversation, makes the redirection (or overthrow) of a topic of conversation very easy. The discourse analyses illustrated how such conflicts were worked out, either in favor of off-task or on-task discussion.

When conflict was produced, whether over the issue of off-task discussion or for other reasons, learners sometimes engaged in a type of communicative behavior known in Internet terminology as *flaming*. Learners often spouted off insults which were interspersed with more serious interaction, at some points taking over the serious interaction completely. In this study, it appears that flaming, at least to some extent, is a form of humor among learners. In the incidences of flaming illustrated above, learners took the opportunity to engage in a speech event that they do not often have the chance to practice in the classroom. Although labeled "puerile" by at least one researcher in his research context (DiMatteo, 1990), it may be the case that this language behavior in this study promoted development of sociolinguistic competence in Spanish. After all, insulting is a speech act which must be learned in an L2 as well as in an L1. Throughout their insulting episodes, learners made use of a wide range of (albeit vulgar) expressions in Spanish. These types of expressions are not part of a typical Spanish foreign language curriculum, which means that learners do not often have a chance to utilize these expressions. Perhaps they picked up these expressions from contacts with native speakers, and were practicing the expressions on their classmates in the chat rooms.

Even more noteworthy than social conflict was social cohesiveness in the chat room discourse community in this study. Learners almost consistently spent time in the beginning of their chat sessions greeting each other extensively and to find out what was new in each others' lives. They also performed elaborate leave-takings, more than an abrupt "adiós". In addition to this, they joked with each other and teased each other, and experimented with their identities and engaged in role plays. In other words, they used their L2 for solidarity and enjoyment.

The sociocultural theoretical framework, with its emphasis on social aspects of language use and development, is an appropriate paradigm in which to frame this study of chat room communication as mediator of language learning. The social, cognitive and affective functions of interaction illustrated in this study are consonant with the sociocultural view of L2 learning. Learners in this study created their own culture or community of language practice in which they co-constructed meaning with each other and with their instructor, utilizing their L2 as semiotic mediator of communication. The community of practice that emerged was a dynamic one in which learners had the opportunity to discuss both academic and nonacademic issues on a variety of levels, and to engage in phatic language use which assisted in their formation of interpersonal relationships. Within this community, the individual identities of the learners came through in the L2 as they used the L2 to discuss their feelings, beliefs, assumptions, and ideas about the world around them. The data presented in this chapter has shown that the chat room medium oromotes the emergence of learner social agency, which empowers learners to become actively engaged in their own L2 use and development.

The interactional features described in this chapter have provided a detailed description of the nature of learner (and instructor) communication within the synchronous CMC context. The next chapters of data analysis will explore other aspects of the use of synchronous CMC in the intermediate foreign language class, to complement the overall picture of synchronous CMC as mediator of L2 use and development.

CHAPTER 5

EFFECT OF TASK

This chapter will address Research Question 2: "What effects do structured versus open-ended communicative tasks have on chat room interaction?". The analysis section will present differences found between the tasks such in informational content, intersubjectivity, use of targeted grammatical structures and off-task discussion. The ensuing discussion will invoke the activity theory branch of sociocultural theory in order to explain important issues surrounding the concept of "task" as it relates to the synchronous CMC context.

Research Question 2: What Effects do Structured versus Open-ended Communicative Tasks Have on Chat Room Interaction?

Each week, 6 of the 8 chat groups (sometimes 7 groups due to absenteesim) were assigned structured tasks which were meant to focus and guide discussion of the week's topic (see Appendix F for tasks). The other two groups were assigned an open-ended task which merely stated the topic and made a brief suggestion regarding possible directions to take in discussion.[7] The structured tasks were similar to the types of communicative tasks that are advocated in the mainstream SLA literature on task-based instruction (as well as the textbook used in this particular Spanish course), i.e., they were constructed to guide the content of conversations and in some cases to elicit specific grammatical structures. In the interactionist approach to SLA that advocates the use of structured tasks with grammatical and lexical support, the purpose is to advance the learner's developing linguistic system by linking specific language input to specific learner output (e.g., Lee, 1999; Long & Crookes, 1993; VanPatten & Lee, 1995). In the sociocultural view to SLA, however, language tasks are useful in terms of the social activity that they generate (Coughlan & Duff, 1994) rather than the linguistic structures that they generate. The subset of post-Vygotskian theory known as activity theory (Coughlan & Duff, 1994; Lantolf & Appel, 1994a) will drive the analysis and discussion in this chapter.

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[7] In Weeks Eight and Nine, the number of groups that were assigned an open-ended task was increased from 2 to 4, since it was clear that learners very much preferred this format over the structured format.

In the process of recursively analyzing the transcript data for differences between structured and open-ended tasks, four general themes became salient. First was the informational content of the structured versus the open-ended tasks, especially the specific subtopics that were discussed, as well as the organization of the discussions. Second was the nature of intersubjective states that were established in both contexts. Another point of interest is the use (or non-use) of particular grammatical structures. Finally, the amount of off-task discussion in each condition manifested a noticeable pattern. This section will address each of these issues in an attempt to answer Research Question 2.

Informational Content

Some interesting patterns evolved in the informational content of structured versus open-ended tasks. These patterns will be illustrated in two categories: subtopics of conversation and organization of discussions. To help illustrate this, the content of Week Five's chat conversations will be closely analyzed, linking this data to a general analysis of chat session subtopics and organization across all nine weeks.

Week Five: Assigned Tasks

The structured task for Week Five consisted of five steps as summarized below (see Appendix F for complete tasks).

> Step 1: Comment on their impressions and what they learned from an assigned reading passage on Celia Cruz, a famous Cuban salsa singer.
>
> Step 2: Describe the types of music that they like, including singers, instruments, favorite songs, etc.
>
> Step 3: Talk about the importance of music in their daily lives. Describe the role that music plays in their lives and some emotions that music makes them feel.

Step 4: Imagine what the world would be like if music did not exist (with grammatical support for the subjunctive and conditional, which are needed to make suppositions like these).

Step 5: Summarize their feelings about music, indicating why music is or is not important for them.

The open-ended task asked learners to comment on their impressions about the article and to talk about the importance of music in society in general. Learners were told to talk about any aspects of music that interested them.

Table 5.1 provides a content analysis of subtopics discussed in the 8 chat groups in Week Five. Of the 8 episodes, Episode 5C and Episode 5D were based on an open-ended task (marked by "O"), whereas the rest of the episodes were structured tasks (S). Step numbers listed at the beginning indicate that learners overtly stated that they were discussing that step. Step numbers in parentheses at the end indicate that the topic related to that step, but the learners did not overtly state that they were discussing that step. Step numbers were included in the open-ended discussion for illustrative/comparative purposes, but the reader is reminded that the open-ended task did not include actual steps. Following Table 5.1 will be a commentary on subtopics and organization of discussions.

TABLE 5.1

Content Analysis of Chat Room Discussions: Week 5

Episode 5A (S)

1. Mentioned that they could not do Step 1 (had not read the article).
2. Types of music that they like; favorite groups; concerts they had seen (Step 2).
3. Importance of music to them (Step 3).
4. (Instructor enters) Music that the instructor likes (Latin American, "oldies") (Step 2).

Episode 5B (S)

1. Impressions of the article (Step 1)
2. Step 2: Types of music that they like.
3. Step 3: when they listen to music in their daily life.
4. Step 4: What life would be like without music.
5. Emotions that music arouses in them (Step 3).
6. (Instructor enters) Music that the instructor likes (Step 2).

Episode 5C (O)

1. Comments on the article (Step 1).
2. Latin music (Step 2).
3. When they listen to music (Step 3).
4. Music therapy (Step 3).
5. Music that they like - singers, songs (Step 2).
6. Off-task discussion (Halloween party).
7. Music in the marching band at Pitt (Step 3).
8. Music in movies (Step 3).

Episode 5D (O)

1. Comments on the article (Step 1).
2. Music that they like - singers, groups (Step 2).
3. Merengue (type of Caribbean music) (Step 2).
4. Off-task discussion (Dominican Republic).
5. Emotions that music arouses in them (Step 3).

Episode 5E (S)

1. (Instructor is present) Comments on the article (Step 1).
2. Latin music (Step 2).
3. (Instructor leaves) Favorite groups, concerts that they saw (Step 2).
4. Off-task discussion (movies).

Episode 5F (S)

1. (Instructor in present) Comments on the article (Step 1).
2. The movies "Dance With Me" and "Saturday Night Fever" (Step 2).
3. Music they like and do not like (Step 2).
4. Types of dance (swing and tango)(Step 2).
5. Where to go dancing in Pittsburgh.

Episode 5G (S)

1. Comments on the article and music they like (Steps 1 and 2, interspersed).
2. Instruments and groups that they like (Step 2).
3. Music with political messages. (Step 3?).
4. How music affects them (Step 3).

Episode 5H (S)

1. Comments on the article (Step 1).
2. Music that they like (Step 2).
3. How music affects them (Step 3).
4. Music in the movies (Step 3).
5. Being deaf or blind - missing out on music (Step 4).
6. Summary (Step 5).

Subtopics

An overarching pattern is apparent in the topical content of the chat sessions in Week Five. The pattern is that in the open-ended discussions, the same types of subtopics were discussed as in the structured tasks. In both Episode 5C and 5D, all of the subtopics coincided or related to those assigned in the structured task. Aside from the fact that both open-ended discussions went into off-task discussion (see below), whereas as only one of the structured-task groups went off topic, there was no detectable difference in topical content between the structured and the open-ended tasks.

In other weeks of the study not reported in Table 5.1, the same pattern was rather consistent, that is, the subtopics discussed in both structured and open-ended tasks were very similar. A subtle difference was that in the open-ended tasks the subtopics were, as would be expected, somewhat more unpredictable than in the structured tasks. The spontaneous subtopics often consisted of accounts of learners' life experiences rather than the academic (i.e., abstract, hypothetical and/or intellectual) type of discussion that the structured tasks encouraged. This was not always the case, however. An example is Episode 4E, an open-ended discussion in which the learners converged upon the topic of black comedies. They proceeded to define this film genre and to classify films they had seen that fit into the genre, explaining why or why not the movies fit into the given classification. This is the type of subtopic that might have been included in a structured task on this particular topic, however the learners came up with this subtopic on their own.

It is important to mention that unpredicted subtopics also emerged in discussion based on a structured task. This occurred when the learners did not adhere closely to the assigned subtopics but rather allowed themselves to expand on the assigned topic in different ways. An example of this is found in Week 6, in which the assigned topic was "marriage", based partly on an episode of the Spanish-language talk show "El Show de Cristina". In Episode 6A, based on a structured task, as well as Episode 6F, based on an open-ended task, the learners established a line of discussion not on the specific content of the talk show, but rather on the nature of (United States) talk shows in general.

Whereas the open-ended task allowed for the emergence of spontaneous topics, the structured task attempted to guide discussion of subtopics and therefore did not call for some of the subtopics that emerged in the discussion.

In summary, there was little observable difference in subtopic development within a structured task discussion versus an open-ended task discussion. Learners often discussed subtopics in open-ended discussions which related to subtasks assigned in the corresponding structured task for that week. Also, when the learners did not adhere closely to the subtasks as stated in the structured tasks, some unpredicted subtopics evolved, just like in discussions based on open-ended tasks.

Organization

There were noticeable patterns in the organization of discussions, especially of structured tasks. First, it can be noted in Table 5.1 that only 1 of the 8 groups completed all of the assigned steps of the structured task. In Episode 5H, the learners proceeded through each of the five steps systematically. In Episode 5B, the group covered all steps except Step 5. Other than these two groups, however, all of the other groups are lacking in discussion of more than 1 of the 5 steps (usually Step 4 and Step 5). In most of the groups, the learners did not state overtly that they were moving on to each step. Rather, they initiated each step with a question or commentary taken from the step on their task sheet. When the group proceeded from step to step without overtly stating that they intended to move to the next step, the conversation appeared to flow rather naturally. That is, it was not generally apparent that learners had been provided with a structured communicative task.

Within the five steps assigned in the structured task, there was a similar pattern of discussion across most of the groups. The general pattern was that most groups spent a great deal of time on Step 2. Most groups proceeded from Step 1 to Step 2, and then either discussed Step 2 from a variety of viewpoints, or returned to Step 2 after completing Step 3 (and sometimes Step 4). This pattern makes it very clear that what learners most wanted to talk about regarding this topic was the types of music that they enjoyed.

Interestingly, the open-ended discussions (Episodes 5C and 5D) manifested a near identical pattern to that seen in discussions based on the structured task. Although these two groups were not given specific subtopics to discuss, most of their discussion brought up topics that corresponded to Steps 1, 2 and 3 of the structured task. Overall, then, there was very little difference in terms of both subtopics and organization of discussion based on structured versus open-ended tasks.

Intersubjectivity

Intersubjectivity was discussed in Chapter 4 as a useful construct to describe the nature of mutual understanding in chat room interaction versus the mere exchange of utterances. The structured tasks, in a sense, attempted to establish intersubjectivity in the discussions a priori, by way of creating and organizing the communicative context for the learners. In the open-ended tasks, learners were allowed more freedom to establish an intersubjective state (or not) within subtopics of their choice.

Learners seemed to establish intersubjectivity with each other when they possessed similar or complementary background knowledge of the given topic, and when the group dynamics (including such factors as motivation and how learners related to each other) allowed them to construct a shared sociocognitive space with each other. In some chat sessions, intersubjectivity was established and maintained for large portions of the session. In others, the achievement of intersubjectivity was more problematic. The assignment of structured versus open-ended tasks by itself did not often make a difference in the extent to which intersubjectivity took place in the discussions, however. In many structured tasks, learners failed to maintain an intersubjective state with each other, even though the task specifically outlined the communicative context for them. In many open-ended tasks, intersubjectivity was established and maintained without the aid of pre-established communicative contexts. Thus, as in the informational content features illustrated above, achievement or non-achievement of intersubjectivity in this study was independent of task type.

Grammatical Structures

Many of the structured tasks highlighted certain grammatical structures (usually verb tenses and moods) that learners might have needed or found useful to carry out their (planned) discussions. The structured task for Week Five, for example, illustrated the use of the conditional tense and the imperfect subjunctive mood to make hypothetical statements called for in Step 5. As will be illustrated in the next chapter, however, the conditional tense was used only a total of 13 times this week, and the imperfect subjunctive was not used at all. Of the 13 occurrences of the conditional tense, 11 occurrences were in discussion of structured tasks. However, considering that the structure was specifically called for in the structured task, 13 does not seem to be a high number of instantiations. Transcript analysis in weeks other than Week Five also showed that learners often did not make use of the grammatical support in the structured tasks. They either did not create contexts in which the structures were needed, or they did not make correct use of the targeted structures. One exception is Week Nine, in which the targeted structure, the future tense, was used 46 times. The topic of Week Nine, however, was "the future", which means that it would have been difficult to discuss the assigned topic without using the future tense (unless they used the periphrastic future, which consists of the verb for "to go" and an infinitive). It appears, then, that the controlled nature of the structured tasks had very little or no effect on the use of the targeted grammatical structures in many of the discussions. There was also no increased frequency of occurrence of targeted grammatical structures in the corresponding open-ended tasks, which might not be expected given that there was no suggestion to use such structures. In terms of patterns of use of targeted grammatical structures, then, there was very little observable difference from week-to-week (except for Week Nine) between structured task discussions an open-ended task discussions.

Off-task Discussion

It has been noted in Chapter 4 and in this chapter that learners had a tendency to resist the imposed structure of communicative tasks in their chat room discussions. In Table 5.1, for example, it was seen that only 1 group out of 8 followed every step of the structured task in an orderly manner. The remaining groups discussed the subtopics out of order and/or skipped some steps of the task. In 16 of the 65 chat sessions in the study, learners temporarily abandoned the assigned task and entered into off-task discussion. In 11 of these 16 off-task discussions, the group had been assigned a structured task. Of the open-ended task groups, only 5 went off-task. Thus, it appears that the structured task favored the emergence of off-task discussion. When learners encountered difficulty in maintaining discourse within the demands of the structured task, they sometimes abandoned not only the structure of the assigned task, but also the entire topic, in favor of topics that interested them more. They might have done this on fewer occasions with an open-ended task because they had the freedom to discuss any aspect of the topic that interested them. In terms of maintaining learners on-task, then, it appears that more open-ended tasks may be more favorable to the synchronous CMC medium of communication than tightly structured tasks.

Summary

In making comparisons between the shape of chat room discourse governed by structured versus open-ended communicative tasks, it is clear that task type had a minimal effect on naturally flowing discourse throughout this study. There were very few observable differences in topical content and organization of the discussions, in achievement and maintenance of intersubjectivity, as well as in use of targeted grammatical structures (except in Week nine of the study). The main difference that was found was in the quantity of off-task discussions, which occurred more often in discussions governed by structured tasks. These findings bring up interesting questions concerning the issue of "task" in chat room communication, which will be taken up below in the discussion of findings.

Discussion

The issue of task is an important one in SLA research and practice. Questions of whether or not to use communicative tasks, as well as what types of tasks to use and why to use them, are deeply ingrained in one's pedagogical beliefs and theoretical orientation to SLA. Before communicative language teaching, for example, the use of pedagogical tasks was not even an issue, because SLA was viewed as a process of acquiring good language habits by means of instructor-led drills. In the still prominent interactionist view of SLA, pedagogical tasks are considered to be a vehicle for providing comprehensible input to the learner by encouraging negotiation of meaning, which often depends on the use of specific grammatical structures. There is abundant empirical evidence that supports the usefulness of structured pedagogical tasks in SLA within the classroom setting (Lee, 1999). While structured communicative tasks appear to fulfill pedagogical needs in today's L2 classrooms in that they bring about the comprehension and production of targeted language structures, structured tasks of this type did not often produce the same results in the synchronous CMC context in this study.

In the data illustrated in this chapter, it was seen that the learners often transformed the assigned tasks in various ways, not carrying out the task as it was originally designed to be carried out. This finding is important in that it shows how difficult it can be to predetermine input and interaction within a communicative language task, especially within the synchronous CMC medium. To explain the learners' construction of communicative tasks in this study, then, it is necessary to go beyond the input/output metaphor to a more encompassing theory. Leont'ev's activity theory (Leont'ev, 1981) provides some explanations of the data observed in this study.

The reader will recall that activity theory is comprised of three levels of analysis: activity, action and operations. Activity describes the social institutionally determined context, including the participants' particular set of assumptions about the appropriate roles, goals, and means to be used in that setting (Leont'ev, 1981). Actions can be embedded in different activities, which are regulated by goals. Operations are the physical or mental means by which an action is carried out.

Coughlan and Duff (1994), in their seminal study on activity theory analysis in SLA tasks, illustrated and explained the differential operations performed by different learners doing the same task, as well as the same learned doing the same task at two different times. Their study was illuminating for at least two important reasons. First, they made the necessary distinction between "task" and "activity", which are very often used interchangeably in the SLA literature and classroom practice. Coughlan and Duff define a task as a "kind of 'behavioral blueprint' provided to subjects in order to elicit linguistic data" (Coughlan & Duff, 1994, p. 175). An activity, they explain, "comprises the behavior that is actually produced when an individual (or group) performs a task. It is the process, as well as the outcome, examined in its sociocultural context" (Coughlan & Duff, 1994, p. 175). Second, by employing activity theory with its three levels of analysis, Coughlan and Duff demonstrated that the same task does not necessarily bring about the same linguistic behaviors among different individuals.

Although the point of Coughlan and Duff's study was to argue that research tasks cannot be identically replicated, their argument applies as well to the differential nature of learner discourse during assigned communicative tasks in this study. It was shown in the analysis of all chat room discussions during Week Five of the study, that different groups carried out their discussions in different ways. Had the learners carried out the task exactly as it was designed, the shape of task discourse in each group would look like that of the group in Episode 5G. That is, they would have systematically discussed each of the subtasks in order, and would have made use of the grammatical support provided in the task. This, after all, is the pedagogical purpose of assigning structured communicative tasks. However, there were marked differences in the shape of task discourse in each chat group. Although a general pattern was recognized in the analysis of these discussions (that most groups skipped Steps 4 and 5, and focused their discussion mainly on Steps 2 and 3), each group carried out the discussion in differing ways. Thus, they transformed the assigned tasks to such an extent that it was barely distinguishable whether each group had been assigned a structured or an open-ended task.

The roots of these differences can be traced to the various levels of Leont'ev's activity theory. First, the definition of "activity" might have been different for each learner. Many college-level L2 learners (of the same culture) might have similar conceptions of the appropriate roles, goals and means of the L2 classroom setting, but this classroom setting was situated within an electronic communicative environment in a computer laboratory rather than the normal classroom. Some learners appeared to view this environment as an extension of the classroom, with the same classroom rules and roles, while others viewed the chat room as an autonomous communicative environment in which they could carry out their conversations as they desired. At the level of action, then, the learners had different goals. For example, the learners in Episode 5G, who systematically followed each step of the assigned task, most likely had the goal of completing the task as it was dictated to them, much like they might have done in the regular classroom setting. Other learners might have had the goal of discussing only aspects of the assigned topic that they found interesting, and of avoiding the grammatical structures that were imposed upon them in the assigned task. Finally, at the level of operation, different learners apparently decided to perform the task in different ways. For example, some learners overtly stated their desire to begin the next step of the task, whereas other learners posed a question relating to the next step, without overtly stating that they were moving on to the next step. Also, some learners returned to a previous step after discussing a subsequent step, and some learners went off-task.

Some researchers in sociocultural theory cast doubt on the predetermined nature of the types of pedagogical tasks proposed in task-based instruction. According to Brooks and Donato, for example, the occurrence of meaningful interaction among learners "requires that learners be given the opportunity to structure tasks and to establish goals as they feel necessary in order to move from mere compliance to engagement,..." (Brooks & Donato, 1994, p. 272). These same researchers argue that tasks are "internally constructed through the moment-to-moment verbal interactions of the learners during the actual task performance" (Brooks & Donato, 1994, p. 272). The chat room data in this study partially corroborate these findings. However, in some cases, learners did proceed through the preestablished steps and did complete the task according to its predefined structure. The key to this, it seems, is whether or not the dynamics of the group interaction allowed learners to achieve the mutual understanding necessary to complete the task as it was defined.

Having identified that communicative tasks take on different shapes at the moment of actually performing them, especially in electronic discussion, it is necessary to discuss the implications this finding. Coughlan and Duff's (1994) point in invoking the activity theoretical framework was to show that any event that generates communicative language is unique. Even though the task or 'blueprint' is the same, the activity that it generates will be unique. Brooks and Donato argue that "*Meaningful* task-based instruction is derived in large part, therefore, from the extent to which learners are permitted to infuse activities with their own goals and procedures" (Brooks & Donato, 1994, p. 272, italics added). This idea may be even more important within synchronous CMC, a medium that has been empirically shown to promote autonomy among L2 learners as they define and work in their own communities of L2 practice. (e.g., Chun, 1994; Kern, 1995; Beauvois, 1992; Warschauer, 1999). It is important for L2 teachers to recognize that learners may internally construct language tasks in ways that are different from the predetermined objectives of the task.. Therefore, the fact that the learners in this study constructed their communicative task in different ways does not mean that they failed at the task or did not learn from the task, nor that the task was somehow innefective. What needs to be taken into account is how learners may have benefitted from their particular operations during the task, rather than merely the outcome.

A remaining issue in the performance of the structured communicative tasks in this study is that of use or avoidance of targeted grammatical structures. As was indicated in the data analysis, learners very often avoided using grammatical structures that were suggested to them and illustrated for them in their tasks. In Week Five, for example, only two groups attempted to use the targeted structures that were part of Step 4 of their task. Such avoidance occurred regularly throughout the study, with the exception of Week Nine, in which a large number of the targeted forms was elicited. It may be the case that, if it is necessary to elicit specific language structures, the synchronous CMC medium may not be the best place to do so. The general theme that runs throughout this study is that of communicative freedom or autonomy. In other words, it appears that for the majority of learners in this study, chat rooms are not a place in which specific tasks or structures are to be imposed on them, but rather a place where they can practice using their L2 in ways that are more comfortable and enjoyable to them.

Regarding Research Question 2, it is clear that the effects of structured versus open-ended task on the chat room communication was very minimal. This is not necessarily a negative finding, however. In terms of the sociocultural framework that drives this study, it is important to observe what learners do (or are allowed to do) with language. In other words, it should be expected that learners will express themselves as free thinking linguistic individuals in their L2, bringing their own identities, beliefs, and assumptions to the learning situation. What is important, then, is the *activity* that emerges from a language task, rather than the specific outcomes.

Within the interactionist literature, there is some doubt surrounding the assignment of open-ended communicative tasks, at least in the classroom context:

> "If we assume that using language is an important part of language learning (e.g., Day's 1986 edited volume of such research), we must provide activities that allow for maximal participation of each class member. Open-ended discussion questions are questionable, if not unreliable, pedagogical tools for promoting language development in second language learners" (Lee, 1999, p. 33).

In terms of the interactionist research agenda and especially in classroom rather than electronic communication, this belief about open-ended tasks may be on the mark. The data illustrated in this study of synchronous CMC in the intermediate L2 Spanish class, however, do not corroborate this position. Open-ended tasks in this study did not appear to decrease the participation of class members in any way. In fact, as the next chapter will illustrate, learners *preferred* open-ended tasks, which suggests that the open-ended tasks might have actually *encouraged* maximum learner participation.

In this chapter activity theory served as a robust framework for illustrating both similarities and differences in task construction among Spanish L2 learners working in the synchronous CMC medium. The general findings are that more open-ended tasks seem to be more suitable to this environment that is noted for providing learners with a great deal of communicative autonomy. If structured communicative tasks are assigned for completion in the chat room environment, then researchers and practitioners need to be aware of research findings that illuminate the nature of task construction in this environment. Further research into task design for synchronous CMC in the L2 classroom will serve as a welcome complement to findings in this study,

CHAPTER 6

TEACHER AND LEARNER PERCEPTIONS

This chapter addresses Research Question 3: "What are the learners' perceptions of the use of chat as a language learning tool?", and Research Question 4: "What are the teacher's perceptions of the use of chat as a language learning tool?". The data on learner and teacher perceptions presented here represent an effort to bring an emic, or participant, perspective to the research study. The data were derived from questionnaires and interviews given to the learners and the teacher after the study was over (see Appendices C and D). The learner questionnaire had three parts to it. Part A included four Likert scale questions to elicit basic background information about the learners' experiences in studying Spanish and in using computers. Part B consisted of eleven Likert scale questions to determine the extent of learners' agreement with general statements about chat sessions. Part C consisted of sixteen open-ended questions. The teacher questionnaire consisted of the same three parts, except that Part A had only two Likert scale items, Part B had only 10 Likert scale items, and Part C had only 11 open-ended questions. The perceptions that emerged from the questionnaire data were grouped into several categories, including usefulness of chat, likes and dislikes, advantages and disadvantages, pseudonyms, instructor presence, task and topic, assistance during chat sessions, perceptions of learning from chat sessions, and other miscellaneous perceptions. After presenting each of these categories, the chapter will conclude with a discussion of the perceptions data.

Research Question 3: What are the Learners' Perceptions of the Use of Chat as a Language Learning Tool?

Learner Background Data

Learners were asked to rate on a scale from 1 to 5 their interest level in learning the Spanish language, experience in using computers (including previous experience with chat), and comfort with using computers. Such information provides a background against which to analyze the learner perception data concerning the use of synchronous CMC in their Spanish class.

Interest Level in the Spanish Language

On a scale of 1 (not at all interested in learning/becoming fluent in Spanish) to 5 (extremely interested in learning/becoming fluent in Spanish), the average for the two classes of learners in terms of their interest level in the Spanish language was 4.7.[8] The overwhelming majority of the learners (n = 28) responded "5" to this question, and of the remaining 8, 5 learners responded "4" and 3 of them responded "3". This figure is perhaps not surprising, considering that at the University of Pittsburgh the foreign language requirement is two semesters of study, and the classes in this research project were fourth semester Spanish classes. Therefore, one can assume that the learners probably enrolled in Spanish 0004 for reasons other than the fulfillment of a language requirement. Some of the reasons mentioned for enrolling in Spanish 0004 were: career benefits (planning to work with Spanish-speaking people in teaching, social work or another capacity), having Spanish-speaking relatives and/or friends, wanting to become fluent in the language for personal reasons, enjoyment of studying Spanish, planning to study abroad, belief that it is important to be bilingual/bicultural, and majoring in Spanish.

Experience in Use of Computers and in Chatting

On a scale of 1 (almost never use a computer) to 5 (very experienced at using computers), the two classes of learners averaged 3.9 in amount of experience using computers. All but two of the learners used computers in their daily lives at least occasionally. The most widely reported uses of the computer included email, Internet and word processing. A few reported being experienced with the Basic programming language and/or HTML (Hypertext Markup Language, used for the design of web sites). In a separate question, 85% (n = 28) of the learners reported having participated in chats on the Internet prior to the study, and 10 these 28 learners had chatted in Spanish as well as in English. In general, then, the learners possessed a great deal of experience in using computers. Also, having experienced synchronous CMC outside of the classroom prior to the study, they most likely had already formed their impressions of what this medium of communication is and how it works.

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[8] Averages reported in the "Learner Background" section are based on answers reported by all 33 learners.

Level of Comfort with Computers

The overall learner level of comfort with computers was 3.7 on a scale of 1 to 5. Only 1 learner reported feeling less than somewhat comfortable with using computers. Most of the learners said that they were extremely comfortable or very comfortable with using computers.

Learner Perceptions

The following categories of learner perceptions were derived from the 11 Likert scale responses in Part B and the answers to the open-ended questions in Part C of the post-study questionnaire. Follow-up interviews were also conducted to obtain clarifications and/or further explanations of questionnaire responses. Table 6.1 shows the averages of the Likert scale questions in Part B of the questionnaire, based on responses from all 33 learners.

TABLE 6.1

Averages of Likert Scale Items in Part B of Learner Questionnaires

Question	Average
1. Communicating in the chat room is a good way to improve my Spanish.	4.2
2. The time we spent in the chat room could have been used more productively as standard class discussion time.	2.3
3. Most of the discussions were superficial.	2.8
4. Reduced amount of feedback from the instructor was a drawback.	2.8
5. Being able to enter comments into the discussion at my own pace was an advantage.	4.3
6. Students were more frank and forthcoming about themselves and their opinions during the chat sessions than during regular class discussions.	4.4
7. Being assigned a specific task helped guide chat discussions.	3.4
8. Not being assigned a specific task (i.e., just a topic) allowed for more interesting conversation.	3.8
9. The best students dominated the chat sessions just as much as regular in-class discussions.	2.7
10. It was difficult to read everything that everyone wrote.	2.3
11. The chat sessions were a welcome change from the usual classroom routine.	4.6

Note. (5) strongly agree, (4) agree, (3) neutral/no opinion, (2) disagree, (1) strongly disagree

Usefulness of Chat

Learners perceived the chat sessions to be useful for various reasons. On a scale of 1 (strongly disagree) to 5 (strongly agree), the 33 learners averaged 4.2 in perceiving that communicating in the chat room was a good way to improve their Spanish (Statement 1, Part B). In a similar vein, they averaged 2.3 in their response to Statement 2, that time spent in the chat room could have been used more productively as standard class discussion time. In Question 3, Part C, the most common reason given for the usefulness of the chat sessions was that chatting for 50 minutes at a time aided learners' fluency in Spanish, as they were forced to create meaning extensively in order to keep the conversations flowing. Specifically, learners noted that the extensive practice aided their fluency in terms of grammar, vocabulary and spelling, and especially speed of communication.

Likes/Dislikes

The 33 learners averaged 4.6 in their response to Statement 11, Part B, that chat sessions were a welcome change from the usual classroom routine. This was also the most recurring theme (n = 19) in Question 1, Part C, where learners reiterated that the chat sessions were a welcome change or a nice break from regular classroom activities, and added that the chat sessions were enjoyable, interesting, relaxing and/or fun.

Another important (recurring) theme in Question 1, Part C (n = 9), was that of building fluency and speed in communicating in Spanish. Learners reiterated that the chat sessions, due to the extensive practice, helped them advance their growing fluency in their L2. Several learners (n = 9) mentioned that their confidence increased significantly due to the chat sessions, and that they appreciated being able to express their opinions freely and frankly. Some learners (n = 5) also noted that they had more time to think when entering their utterances into the ongoing conversation, as compared to classroom discussions, where they feel "on the spot" when called upon by the instructor. In addition to fluency, accuracy was also mentioned by 4 learners. These learners felt that the chat room context helped them to focus on the forms of the language, both in that they could see their writing as it evolved on the computer screen, and in the occasions that the instructor chose to use chat room transcripts as personalized grammar lessons in class. Additional learner comments in this section of the questionnaire included an enjoyment of the anonymity that the pseudonyms afforded (see "pseudonyms/identities" later in this section); that chatting builds comprehension skills, in addition to production skills; that learners enjoyed not being corrected immediately as is the case in classroom discussion (because immediate correction can hinder the conversation); and that extensive chatting helped them to begin to *think* in Spanish.

Question 2, Part C of the post-study questionnaire unveiled a number of learner dislikes concerning the chat sessions. The most recurrent of these (n = 14) was the assigned topics (discussed in more detail below). Beyond the assigned topics, the remaining dislikes were reported by 1 to 3 learners each, namely: (1) having to deal with poor typing skills, (2) the anonymity, (3) absence of the instructor, (4) not having switched groups often enough, (5) not having enough time to explain something correctly if they did not initially get their point across (because of the fast speed of the discussion), (6) "down time" or moments of non-activity in the chat room, (7) feeling marginalized because their opinions contrasted sharply with those of others in the chat room, (8) frustration at being unable to express thoughts (due to limited proficiency), (9) concern about the inaccuracy of their Spanish, (10) that their Spanish did not improve throughout the semester, and (11) that they should have been allowed to chat from home or somewhere else other than the computer laboratory.[9] Three of the learners indicated that they had no dislikes at all regarding the chat sessions.

In summary, learners reported a variety of aspects that they both liked and disliked about the chat sessions in which they participated. Regarding positive aspects of chatting, the most salient themes are that chatting is a new and interesting instructional activity, as compared to normal classroom activities; that the equalization of opportunities to communicate is beneficial to learners, and that the anonymity afforded by both the pseudonyms and the fact that learners are not face-to-face in the classroom, boosts learner confidence. Perhaps the biggest finding here is that the learners did not like being assigned specific topics, even though they were always assigned conversational topics in the classroom. The remaining dislikes reported in the learner questionnaires represent a miscellaneous list of aspects reported by 1 to 3 learners. The most pertinent of these will be treated in the discussion section of this chapter.

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[9] In fact, 2 learners connected to the chat server from their homes without permission, claiming that they did not feel well enough to report to the computer lab. This point is an important one in that one of the major benefits of the Internet is its capacity to connect human beings from remote locations.

Advantages/Disadvantages of Chat Room Communication

Questions 3 and 4, Part C, were designed to extract information about synchronous CMC as a mediator of L2 learning. In several instances the data obtained in this category overlapped with the likes/dislikes category, the purpose of which was to uncover the more affective issues of chatting. The two categories combined illuminate the perceived benefits and drawbacks of synchronous CMC.

A wide range of perceived advantages was uncovered in this part of the questionnaire. Many of these related to the process of learning the Spanish language. Learners reported the usefulness of both instructor and learner feedback, the benefits of extensive communicative practice, and that their knowledge of Spanish vocabulary and grammatical structures increased as a result of participating in the chat sessions. Regarding communicative practice, specific references were made to the opportunity to negotiate meaning with others, that extensive communicative practice enhanced their fluency (in terms of speed of communication), that having to both comprehend and produce language extensively in order to keep conversations flowing was good for their learning, and that extensive communicative practice refreshed their memory in terms of vocabulary words and grammatical structures which they had not seen for long periods of time. Regarding assistance available to learners during chat sessions, some learners mentioned that being able to consult a dictionary or other learners before entering comments into the conversation, was an advantage. A final advantage reported by 1 learner was the variety of topics covered in the nine chat sessions.

In addition to pedagogical comments, a second category of comments emerged. These related to the logistics of chat room communication (as opposed to classroom discourse). Several learners mentioned that it was easier to respond to others in the chat room than in the classroom, that it was an advantage to see the conversation on the computer screen in front of them, that other learners were more open in their communication, and that there seemed to be increased participation from other learners as compared to classroom discussion. Also reported as an advantage was the assistance available to learners as they participate in chat room discussions.

The reported disadvantages of synchronous CMC very much overlapped with the previously reported dislikes. Mentioned in Question 4, Part C, as well as in Question 2, were the assigned topics; the absence of the instructor and, hence, instructor feedback; periodic low levels of learner participation; not knowing the words needed to communicate an idea in Spanish; and the slowness of the chat conversation as compared to face-to-face discussion. Newly reported items in this section include the absence of diacritic marks,[10] the slow speed of chat room communication as compared to face-to-face-to-face discussion, and being alone in the chat room for certain periods of time (before being reassigned due to absenteeism of all other assigned group members).

Pseudonyms/Identities

Questions 5 and 6, Part C, asked learners for their perceptions regarding the use of pseudonyms in the chat rooms. Several learners replied that within a very short time they knew who the other learners in their chat room were, and therefore the pseudonym made no difference in their communication (14 learners said they knew who all the interlocutors were, and 14 said they sometimes knew; only 5 of them did not know for sure). This could be because they participated in classroom discussion with each other during two fifty-minute class periods per week, and thus knew enough details about some

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10. The absence of use of diacritic marks is the result of the researcher's decision to not burden learners with the extra key strokes necessary to create special characters in Spanish. Two learners reported this as a drawback to the chat sessions. In future research studies, the researcher would undoubtedly encourage learners to use diacritic marks as often as possible without slowing down their speed of communication.

of their classmates to identify them in the chat rooms. Additionally, the fact that the chat room discussions were carried out in a campus computer laboratory reserved solely for the classes involved in the study, made it even more difficult to maintain anonymity, as learners could see each other's computer screens. One of the reasons that chat groups were changed during the study was to provide learners with the opportunity to communicate with others whose identities they might not have known.

Out of 33 learners, 14 of them remarked that using a pseudonym in the chat room made a difference in their communication. When asked to classify the difference as positive or negative, 11 learners said that they felt their communication was enhanced in some way by using a pseudonym, and 3 learners said that using the pseudonym added a negative aspect to their communication. The learners who reported the pseudonyms to be positive attributed their opinion to the fact that interlocutors were not afraid to express their true opinions, i.e., they were more sincere. Other noted positive aspects of the use of pseudonyms were that it made learners feel more comfortable and that it was fun. The negative aspects of the use of pseudonyms reported by 3 learners were that these learners preferred communicating with others whom they both knew and liked, and one learner reported, with no explanation, that the pseudonyms were "stupid".

In summary, most of the learners in the study preferred using pseudonyms because the anonymity afforded them the confidence to express their ideas in Spanish without becoming embarrassed about the inaccuracy of their Spanish, or the nature of the opinions that they expressed in the chat rooms. A very small number of learners actually preferred to know the identity of their interlocutors, and one learner felt that learners should be given the *choice* to use a pseudonym or not. An additional factor of importance to the anonymity of learner identities is that learners often discovered the identities of other learners rather quickly anyway.

Topic

Learners were asked in Part C, Question 13 of the questionnaire to rank the assigned chat topics according to their two favorite topics and their two least favorite topics. Five learners did not answer this question, and 3 others only mentioned one favorite and/or least favorite topic. Answers from 3 of the 5 who did not respond in the questionnaire were obtained in interviews. Table 5.2 illustrates the results of learner rankings, in a single category of favorite topics and a single category of least favorites.

TABLE 6.2

Favorite and Least Favorite Chat Topics

Favorite		Least Favorite	
Topic	No. of Responses	Topic	No. of Responses
El cine	11	Los animales	13
La música	10	La libertad	9
El sexismo	8	La censura	9
La libertad	8	El futuro	7
La censura	6	Escándalos de la familia	7
El matrimonio	6	El matrimonio	6
Escándalos de la familia	5	El sexismo	4
Los animales	5	La música	1
El futuro	4	El cine	0

Note. "la música" = music; "el sexismo" = sexism; "la libertad" = freedom; "la censura" = censorship; "el matrimonio" = marriage; "escándalos de la familia" = family scandals; "los animales" = animals; "el futuro" = the future.

Probably the most salient finding in Table 5.2 is that the three topics selected most often by learners as their favorites ("el cine", "la música", and "el sexismo") were also picked the least amount of times as being the least favorite topics. It is clear that these were the three most popular of all topics assigned throughout the study. Particularly noteworthy is that no one disliked "el cine" and only 1 learner out of 33 disliked "la música". At the other end of the spectrum, the most disliked topic was "los animales" (n = 13), followed by "la libertad" (n = 9) and "la censura" (n = 9). The most disliked topic, "los animales", was also chosen very few times by other learners as a most liked topic. "La libertad" and "la censura", however, received almost the same number of favorite votes as least-favorite votes. The remaining topics, "el matrimonio", "escándalos de la familia" and "el futuro", each received a near equal number of votes in the favorite and least-favorite categories. In sum, three topics stand out as very popular topics, and one stands out as very unpopular. Beyond these four topics, the remaining topics were chosen with nearly the same frequency as favorite and least favorite.

The learners provided a variety of reasons (Question 13, Part C) why they liked certain chat sessions more than most others. The main reason reported was that the topic was interesting or fun. Others stated that the topics of their favorite chat sessions were easy to talk about, i.e., that there were many things to say about the topic. In a similar vein, some learners felt that the topics of their favorite sessions provoked intelligent conversation (as opposed to superficial conversation), and that the topic allowed for a variety of opinions, which made the topic a good one for argument. Some felt that their favorite topics constituted important social issues that were very worthwhile to discuss. One person made a comment specifically regarding the session, rather than the topic, stating that his favorite session was a "fine discussion". In sum, it appears that for the learners in this study, useful topics of chat room discussion are ones that both interested them and in some way urged them to contribute their personal opinions to the discussion, usually by means of allowing for or encouraging the expression of a wide range of personal opinions.

Learner perceptions regarding least-liked chat sessions were perhaps even more informative than that regarding most-liked sessions. Whereas the most-liked chat sessions involved topics that were interesting, fun and/or easy to talk about, the least-liked sessions were disliked because the topics were uninteresting, not fun, and/or not easy to talk about. Learners were able to pinpoint the precise reasons that the topics did not work well for them. For example, they noted that some topics, because they were uninteresting or unstimulating, did not give learners incentive to say much in the chat rooms. Therefore there was not a variety of opinions expressed, and consequently, little to feed an ongoing discussion. A few learners argued that the reason some of the topics did not work well was because the topics were either too superficial (especially "los animales") or too abstract (i.e., "la libertad, "el sexismo"). If the topic was too superficial for them, then the tendency was to make short, simple statements and expressions of agreement in the chat room, rather than to express substantive opinions and arguments. Topics that were too abstract discouraged learners from contributing to the conversation because they felt insecure about their formation of ideas or the means to express their ideas adequately in Spanish. One learner commented that she was "sick of" the assigned topic. Interestingly, she was referring to "el futuro", during which the group entered into a discussion of predicted problems that society would face as the calendar changed from December 31, 1999, to January 1, 2000. The chat session occurred just a few short weeks before January 1, 2000, when there was a great deal of hype in the media about "y2k". In addition to these comments, one learner said that her least-liked session "had no life to it", which may have been due to the assigned topic or due to a wide range of circumstances involving the learners themselves.

A few of the learner observations involved a combination of the assigned topic and the assigned task. They stated that in their least-liked chat sessions, they had not enjoyed the video or the reading passage from which the chat sessions had been launched. This seems to indicate that it was not the topic itself that learners did not relate to, but rather the assigned task. Additional problems concerning the assigned task within the assigned topic were that the questions were too difficult to answer, and that several or all of the learners had not prepared for the chat session by reading or viewing the assigned material.

To summarize, the topics that worked well for the learners were those that stimulated conversation and allowed learners to communicate within the means of their current proficiency level in Spanish. Regarding the topics that were least-liked in the study, the learners were able to pinpoint the precise reason for their dislike of the topics, which provides interesting insights into the assignment of topics in synchronous CMC.

Task

As Research Question 2 looks specifically at the effect of the assigned tasks on learner discourse in the chat room environment, the tasks were varied to allow for differences in discourse to occur. As explained in Chapter 3 , three groups were given a structured communicative task similar to those advocated by Van Patten and Lee (1995) and Lee (1999), with corresponding subtasks as well as grammatical support (see Appendix F for tasks). The remaining group was given the same topic but no structure or grammatical support for their task. The open-ended task groups were rotated every week so that all learners were exposed to both types of tasks several times throughout the study. To obtain perceptions about the assigned tasks, Question 9, Part C of the questionnaire asked if they noticed a difference in their tasks from week-to-week. Seven learners stated that they noticed a difference. They were able to identify that some tasks were broader, more open-ended, loose or general; whereas other tasks gave a long list of questions, were more rigid in their specifications, or very specific. Sixteen learners stated that they noticed no difference in the tasks from week-to-week. Some of the learners answered the question in such a way that it was not clear if they noticed a difference or not. Of the learners who noticed a difference, six of them stated that they preferred the open-ended task to the structured task. They reported having felt that the open-ended tasks were easier to discuss and gave them more freedom to decide in which direction they wanted to take their discussion, which made the discussion more interesting to them. One learner noted that the open-ended tasks were more difficult to get started, but that once they got started, they were easier to keep going. There were also two comments regarding one of the structured tasks which required learners to go to another web site and look at constitutions of Latin American countries, and then to report what they learned in their chat rooms. One learner commented that she particularly enjoyed having the opportunity to do this, while another commented that having to go to another web site took unnecessary time away from the chat session. In summary, most learners did not notice a difference in the weekly tasks, and those who did preferred the open-ended tasks.

Instructor Presence

The instructor was not present in all four chat rooms at one time,[11] therefore, three of the chat rooms were occupied by only learner interlocutors at any given time. The presence or absence of the instructor made for an interesting analysis of interactional features of chat room communication, as was demonstrated in Chapter 4. Question 10, Part C, asked learners whether they preferred that the instructor be present or absent during chat sessions. Ten learners stated that they preferred the instructor to be in the room; 9 preferred that she not be in the room; and 13 learners claimed that it made no difference to them whether the instructor was present or not. Learners who preferred that the instructor be present liked that the instructor corrected their errors and kept them on task. Learners who preferred that the instructor not be in the room either felt intimidated by the instructor's error correction, and/or enjoyed the opportunity to allow the conversations to take its own free course, which sometimes led to off-task discussion.

Assistance During Chat Sessions

Unlike face-to-face classroom discussion, learners in a chat room environment have access to a wide range of resources that can potentially assist them as their online discussion unfolds. Several learners in the current study (n = 24) took advantage of various types of assistance during their electronic discussions (reported in Question 7,

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[11] It was logistically possible to be simultaneously present in more than one chat room, but the instructor did not feel comfortable doing so.

Part C). The most widely utilized form of assistance was a Spanish-English/English-Spanish dictionary (n = 15), followed by consulting with other individuals, including other learners, the instructor and the researcher (n = 11) and the course textbook (n = 6). A few learners reported having used verb conjugation charts or books in an attempt to provide correct verb forms (see 501 Spanish Verbs), as well as their class notes, a translation machine, and the Alta Vista online translator (available at the Alta Vista web site at http://www.altavista.com). For every type of assistance utilized, the learners considered the assistance to be helpful to their communication endeavors in the chat room, with the exception of one person who had little success with the bilingual dictionary, one person who considered the textbook to be unhelpful, and two persons who said that consulting other learners was only helpful at times (since the desired information was also not part of the other person's knowledge). Additionally, 24 of the learners reported having scrolled back to previous conversation for information they wanted or needed in order to contribute to ongoing conversations. While it is possible to access some of these forms of assistance in traditional classroom activities, especially small group work, the nature of ongoing face-to-face discussion does not allow time to seek spontaneous assistance from sources other than the teacher or interlocutor. It appears that learners were able to perceive the unique opportunities for assistance that chat room communication affords them, and to make use of such assistance in a way that enhanced their electronic communication.

Learning from Chat

As reported in Question 14, Part C, most of the learners (n = 19) felt that having participated in the chat room conversations helped them to improve their Spanish in some way. Nine of them stated that they did not feel that chatting helped their Spanish in any way, and from the answers of the remaining learners, it was less than clear if they felt they had learned anything from the chat experience. Learners reported having acquired better conversation skills, particular grammatical structures such as the subjunctive mood and the conditional tense, specific vocabulary items, better spelling skills, and how to start "thinking in Spanish". Conversation skills and thinking in Spanish are two answers to this question that one would expect, given that learners have already noted the positive effect of extensive communicative practice on their Spanish skills. When the researcher pursued the issue of acquisition of particular grammatical structures, however, learners were generally not able to explain the formation of the given structure nor to give a specific example of a sentence in which the structure occurred in their chat discussions. One learner who reported having acquired the conditional tense during the chat study mentioned that she had been exposed to the conditional tense in her previous semester of Spanish study, but that using the conditional in the chat rooms reinforced the structure in her mind. She gave the example of the verb "tendría" (she/he would have) as one she believed to have used in a chat session. The same held true for recollection of specific vocabulary items, with the exception of one learner who stated that she learned the (vulgar) words "mierda" (*shit*) and "puta" (*slut/whore*) in one of the chat sessions. The data collected in this study, therefore, suggest that learners may have improved their overall communicative skills in Spanish (i.e. fluency), but in terms of specific language features, the data is less than conclusive.

Other Perceptions

The post-study questionnaire was rather tightly structured in the sense that all of the questions were specific, except for the last question (Question 16, Part C), which asked learners for any additional comments concerning the study. Eight of the learners had no additional comments at all. Most of the learners who made additional comments reiterated that the chat sessions were fun, interesting, and a nice change from the regular classroom activities. Several learner answers to this question, however, took the shape of pedagogical recommendations for the implementation of synchronous CMC into the foreign language curriculum. One of the learner pedagogical recommendations was that there should be more native or proficient speakers in the chat room (other than the instructor, who holds authority over learners) to interact with learners, so that the proficient speakers can help the less proficient speakers with their Spanish skills.

Two additional learner recommendations had to do with communicative freedom in the chat rooms. One learner reiterated that the chat sessions should not be confined to a computer laboratory, but rather that learners should be permitted to chat from their homes or other locations. Another learner restated that there should be no assigned topics — that learners should be given the freedom to chat about whatever topics they choose. Finally, two recommendations were made regarding advance organizers of chat sessions. One learner suggested that the chat topic be introduced in the class meeting prior to the chat session. Another learner suggested that a list of anticipated vocabulary words should be drawn up and distributed to learners prior to the chat session.

Research Question 4: What are the Teacher's Perceptions of the Use of Chat as a Language Learning Tool?

Teacher Background Data

In order to learn something about the teacher in this study, background information was solicited in a pre-study interview and a post-study questionnaire. The instructor of the two intermediate Spanish courses involved in the study is a native speaker of Spanish, and was born in Venezuela. She had taught college-level Spanish for three and one half years prior to the beginning of the study, including beginning and intermediate levels, as well as advanced conversation. In the pre-study interview, the instructor reported seeing herself as a transmitter of grammatical knowledge, a role she carried out by means of organizing classroom activities around discrete grammatical structures, and by providing negative feedback to learners when they made grammatical errors. She also expressed having an active concern for the progress of her learners, and for attending to their affective needs. From the researcher's classroom observations, her learners seemed to have a rapport with her. The instructor did not appear to be overly demanding of learners in terms of academic requirements for her course.

The instructor, like many of her learners, used computers quite often in her daily academic life, especially electronic mail and word processing programs (reported in Part

A of the instructor questionnaire). She rated herself between somewhat comfortable and very comfortable with using computers (4.5 on the Likert scale). In the pre-study interview (Apendix B), she stated that she had never participated in a chat session prior to the study, and did not know what to expect during the study. She did not have any preconceived motives or desired outcomes for the study, nor did she have any questions about it prior to its initiation.

Teacher Perceptions

In order to obtain data on the same issues, the post-study teacher questionnaire was modeled after the post-study learner questionnaire. The ensuing presentation of teacher perceptions data consists of the same categories of perceptions as the previous presentation of learner perception data.

Usefulness of Chat

The instructor agreed (4 on the 5 point Likert scale) with Statement 1, Part B, that communicating in the chat room was a good way for learners to improve their Spanish. However, she had neutral feelings (3 on the scale) about whether the time spent chatting could have been used more productively as standard class discussion time. She believed that the extensive communication was good for the learners, but that the chat sessions would be more useful if they were held outside of and in addition to the three weekly class contact hours. As was previously mentioned, holding the chat sessions during the established schedule of class meetings was a function of the need to control the implementation of the research methodology designed for the study. In the post-study interview, the instructor stated that the chat sessions would have been much more useful if held outside of the three weekly contact hours. Her reason for this preference was that she perceived the desire on the part of learners to participate in the chat from their homes or their location of choice, and she sensed that learners would have liked to have more control of their chat sessions, i.e., that learners would prefer that she not be present during their discussions.

Likes/Dislikes

What the instructor liked most about the chat sessions (Question 1, Part C) was that the learners who often did not participate in the classroom participated much more extensively in the chat rooms. She felt that the chat room gave learners a certain sense of freedom of expression, especially with the use of pseudonyms. As for dislikes (Question 2, Part C), she reiterated that the chat sessions should be held outside of class time, and that she did not necessarily need to be present in the sessions. She had the feeling that the discussions were somehow “different” when she was present; that the learners were not as frank as when she was not there. She also felt that learners were more worried about producing accurate Spanish for her than in communicating their ideas, however accurate the communication might actually have been.

Advantages/Disadvantages of Chat Room Communication

In Question 3, Part C, the instructor reported as an advantage of chatting that the extensive practice is good for learners. She felt that the extensive practice increased their written fluency. She also felt that their written fluency carried over somewhat into oral fluency in the classroom. She believed that it was easier for learners to acquire vocabulary via the chat room because the words appeared before them in writing, which provides a higher degree of salience than does hearing a word without seeing it written. A major disadvantage to her (Question 4, Part C), at least in the beginning, was that she could not control the discussions as she did in the classroom. This perception changed throughout the course of the study, as the instructor became adjusted to the high degree of learner autonomy in the chat rooms.

Pseudonyms/Identities

The instructor felt that the use of pseudonyms was a positive aspect of the chat sessions (Question 5, Part C). In fact, she commented that it would be better if not even the instructor knew who the chatters were. However, not knowing who the learners were would have made it impossible to hold them responsible for class participation during the chat sessions. She felt that when the learners did not know who their fellow chatters were, they expressed themselves more easily. Since the instructor knew who all of the learners were, the use of pseudonyms made no difference in her communication with them.

Instructor Presence

At the beginning of the study, the instructor reported (Question 9, Part C) experiencing some frustration about not being able to be present in all of the chat rooms, thus leaving many learners "unattended". She feared that learners were not learning anything if she was not present in the room with them. In the post-study interview she explained that in classroom small group work, she maintained control in the sense that she could *see* all of the learners. Even though it appeared that she was focused exclusively on one group at a time, she could divide her attention in order to maintain a secondary supervision, of sorts, of other groups. It would have been logistically possible for her to be in multiple rooms simultaneously within the WebCT program, thus imitating the secondary supervision that is characteristic of her role in the classroom, but she said she did not feel comfortable enough with her chatting skills to attempt this. Thus, she remained in one room at a time, which gave her an average of twelve minutes per session with each of the four groups. She indicated that as the chat sessions evolved, her frustration at not being able to work with all learners at once dissipated. She eventually saw that learners were quite capable of maintaining a conversation on their own, even if they often digressed from the assigned task.

Topic

In Question 11, Part C the instructor reported her favorite topics to be "la música" and "escándalos de la familia". She felt that these conversations were more lively than the rest. The instructor's least-liked topics were "el futuro" and "los animales". She did not feel much enthusiasm on the part of the learners, for these topics. The reader will recall that "los animales" was also the most disliked topic of the learners. "El futuro", however, was not at the top of the learners' list of disliked topics. In the post-study interview, the instructor indicated that she chose her most-liked and least-liked topics based mainly on her perception of the liveliness (or lack of) of the discussions, and learner enthusiasm. She added that, for instructional purposes, she could have easily facilitated discussion on any of the nine assigned topics. However, the manner in which her learners approached each topic determined, for the most part, the communicative nature of the chat sessions.

Task

In Question 8, Part C, the instructor stated that she preferred the structured tasks over the open-ended tasks. She felt that there was more control of the chat sessions with the structured activities, because she had something concrete to refer to (the sub-tasks) when she attempted to keep learners on-task. However, she recognized that the best discussions seemed to evolve from the open-ended tasks. For this reason, she reiterated her recommendation that synchronous CMC as a learning and teaching tool would best be implemented outside of the confines of the classroom environment. In the post-study interview the instructor stated that structured communicative tasks like the ones assigned in this study worked very well in the classroom. The new, electronic medium of communication, however, seems to demand alternative types of activities that allow learners more freedom to elaborate their discourse on their own terms.

Learning from Chat

The instructor expressed her belief (Question 12, Part C) that the learners' use of the subjunctive verb mood improved throughout the semester, which she especially noted in the chat room discussions. Several of the structured activities provided grammatical support in the form of explanations and examples of proper usage of the subjunctive. Additionally, the instructor utilized chat room scripts on a few occasions as a part of her classroom agenda, for the purpose of highlighting learner errors and using the transcripts as a linguistic corpus for individualized grammar instruction. In addition to the subjunctive, the instructor felt that learners might have improved in their use of other grammatical structures throughout the study. During the post-study interview she could not think of any concrete examples, however, except for the use of the word "tampoco". In Spanish, the negative of "también" (also) is "tampoco" (not either). The instructor noted that this expression occurred very frequently in the chat sessions, and that initially learners very seldom used the word "tampoco" when it should have been used. She felt that some of the learners did eventually acquire this word and use it in subsequent chat sessions.

Where the instructor observed the most learner growth was in their fluency in Spanish. In the post-study interview, she reported having observed that learners were less hesitant to formulate complete sentences in Spanish, both in the chat rooms and in the classroom. She felt that this phenomenon was due to the chat room because she did not believe that the learners in her Spanish 0004 classes prior to the study manifested such a high fluency rate. Of course, these are *perceptions* of the instructor, and as such, no claims are being made that chatting improves learner fluency. It would be theoretically and pedagogically interesting, however, to further investigate this aspect of the use of synchronous CMC in second/foreign language classes. In sum, the instructor, like the learners, felt that some sort of learning did take place throughout the chat study. However, it is difficult to assess language learning without implementing some sort of formal measure, which is outside of the scope of this study.

Other Perceptions

In Question 14, Part C, and in the post-study interview, the instructor made several final comments regarding the chat study. She reiterated that in the beginning of the study, she felt the need to regulate the discussions and to correct as many learner errors as possible. As the study evolved, however, she began to see that the learners could communicate on their own, and that the extensive practice was beneficial to their growing fluency in the Spanish language. She also reiterated her desire to hold chat sessions outside of scheduled class time, and perhaps to not even involve herself in chat sessions, relinquishing her authority in favor of learner control of their own L2 discourse. She added that she learned a great deal herself about electronic discussion, which stimulated her thinking about ways that she could implement not only synchronous CMC, but technology in general, in her future Spanish courses.

Discussion

"Effective CMC instruction depends often on a good fit between an instructor's teaching style, learner skills, attitudes and interests, and instructional format, and the content area being addressed" (Eastmond & Ziegahn, 1995, p. 63). This quote, taken from a book on educational applications of computer-mediated communication (Berge & Collins, 1995), summarizes the important issues to take into account when implementing synchronous CMC into a course like the intermediate Spanish course involved in this study. With this in mind, this chapter has allowed the voices of the learners and teacher involved in the study to tell their own account of their experiences using synchronous CMC in their class. In the post-Vygotskyan view of SLA, learners are viewed as social agents who bring their own personal history and their unique beliefs, assumptions and values to the language learning context. For this reason, the emic perspective gleaned from learners, as well as the teacher, are an important component in describing the mediational qualities of synchronous CMC in these particular L2 classes. This discussion will address both Research Question 3 and Research Question 4 by way of piecing together the information provided by the participants in the study, to provide a conclusive account of their experiences with synchronous CMC in their Spanish class.

Learner Background

A sociocultural approach to cognitive development places particular importance on the social and cultural-historical experiences of learners. Gillette, for example, argues that "A thorough examination of each participant's social environment is crucial in determining whether acquiring a second language is viewed as a worthwhile pursuit or not" (Gillette, 1994). It is important, then, to have background information concerning the role of Spanish language instruction and the use of computers by learners in the study. Such information helped to provide insight into the learners' expectations of chat room communication which were socioculturally derived from their life experiences. Most of the learners reported being highly motivated to learn Spanish, and most reported using computers regularly and being very comfortable using computers (only 1 of the 33 learners indicated infrequent use of computers and a negative attitude towards computers). Furthermore, most of the learners had participated in chat sessions on the Internet prior to the beginning of this study. Therefore, there was no reason to believe that any but one of the learners might have a major dislike or fear of using computers in their education or in this study. The background data suggested that the learners in this study stood a good chance of benefitting from the use of synchronous CMC as a mediator of their L2 learning.

Learner Perceptions

Using post-study questionnaires and follow-up interviews as data collection instruments, a great deal of information turned up describing learner perceptions of the use of synchronous CMC as a tool to mediate L2 learning. The voices of the learners in this study informed about the usefulness of the chat sessions, their likes and dislikes about chatting, advantages and disadvantages of chat room communication, their feelings about using pseudonyms in their chat sessions, the assigned topics and tasks, the instructor's presence (and absence) in the chat room, the use of available assistance during chat sessions, what they felt they learned throughout the chat study, and miscellaneous perceptions, which included insightful pedagogical recommendations for future use of chat in second/foreign language classes.

Whereas in Chapter 4 the emerged community of language practice was defined and described based on the researcher's interpretation of chat room transcripts, this chapter illuminated the same community of practice from another angle, the perspective of the participants.

Overwhelmingly, the learners in this study enjoyed their chatting experiences. This was an important finding because attitudinal factors are known to have a large impact on learning. In recent years, issues of learner affect have received abundant attention in the foreign language pedagogical literature. Krashen informs us that learners stand a much better chance of acquiring language in the classroom when their "affective filter" is low, i.e., when they do not have anxiety about learning the language (Krashen, 1981). Indeed, most foreign language educators, and educators in general, for that matter, would probably agree that learning should be enjoyable.

Several factors were bound up in the learners' enjoyment of chat sessions. What stood out the most in the learner perceptions was the issue of autonomy. Most learners preferred to choose their own topics of conversation, and upon being assigned a topic, they preferred to approach the topic in their own way rather than having the topic organized for them in a structured task. This finding explains why each of the chat groups carried out their discussion of assigned topics in different ways. Further, most of the learners reported that they enjoyed the off-task discussion that occurred in their chat rooms. They enjoyed off-task discussion because it gave them a chance to use the Spanish language to talk about topics and issues that were important to them and had relevance to their lives. Very often their chosen topics related to everyday events or leisure activities, generally falling into a category labeled by the researcher (in Chapter 4) as "small talk". This finding is not surprising, for several reasons. Firstly, the American Heritage Dictionary defines "chat" as "light, informal conversation". Most of the learners in this study had participated in Internet chats prior to this study. Internet chats are usually centered around topics of common interest to the chatters, and is often very light and informal, as the dictionary definition specifies. These are the perceptions of chat that the learners brought with them to this study. Their sociocultural background, then, conditioned them to have certain expectations of chatting prior to participating in the study. It was clear from the learner questionnaires that the learners often enjoyed participating in the chat sessions. The researcher also often observed learners engaged in laughter over the contents of chat sessions throughout the study.

Learners also reported that their appropriation of the chat room environment afforded them the opportunity to talk about things in a way that they would not normally do in the classroom. For example, they spent a great deal of time greeting each other and bringing each other up to date on their daily activities at the beginning of every chat session; an opportunity that they rarely have in a classroom situation. They also took time for leave-takings, which the normal classroom situation, focused on language forms and vocabulary, often does not facilitate. Further, they had extensive opportunities to agree and disagree with each others' opinions, to experiment with alternate identities and role plays, joke and tease each other and even to insult each other (in what seemed like a playful way). These interactional features that were illustrated in discourse analyses in Chapter 4, have been referred to by learners in the post-study questionnaires and interviews as aspects of chatting that they viewed as enjoyable, useful and beneficial. Most importantly, they perceived that these interactional features enhanced their learning of the Spanish language. Although they were in most cases unable to pinpoint specific language structures or lexical items that they learned in the chat sessions, the overall feeling was that the community of practice that they created afforded them extensive practice communicating in Spanish, which was beneficial to their growing fluency in the language. Indeed, skill acquisition theory indicates that any skill is acquired and routinized by means of practice. One of the biggest findings in this study, then, is that the chat room environment had a very positive impact on the learners' affective domain, which in turn inspired them to utilize the chat rooms as their arena for using the Spanish language in ways that they wished to use it.

A minority of learners, however, preferred to discuss the assigned topic and felt comfortable with the guidance provided in the structured activities. These learners apparently viewed the chat room context as an extension of classroom activities, which should operate under the same classroom rules. These learners also enjoyed the chat sessions and perceived them as useful for a variety of reasons, but they expected their fellow chatters to adhere to the assigned task and topic, and not to take advantage of the autonomous nature of the chat environment. It was easy to detect instantiations of these learners' beliefs in the chat transcripts, as they consistently followed their tasks step-by-step, and at times came into conflict with learners who chose to adhere to the autonomy concept rather than the extension of the classroom concept. Their reporting of such beliefs in the questionnaire thus serves as triangulation of this data.

Another aspect of interest regarding autonomy was turned up in the learner perceptions data. A few learners expressed their desire to chat from a location other than the computer lab where all learners were required to report. While the reasons for this arrangement had to do with control of the research setting, these learners undoubtedly made such comments based on their cultural-historical experiences with networked computer technology. That is, these learners recognized that one of the unique benefits of Internet technology is that it breaks down barriers of both time and space. It can bring together persons from remote geographic locations, whether these locations be different buildings on the same university campus, or different countries in the world. The learners in this study recognized that autonomy is one of the most beneficial factors in the use of synchronous CMC. The autonomous nature of synchronous CMC may therefore be exploited to make synchronous CMC a useful supplement to classroom communication, where communicative autonomy is typically very limited. It may be the case that the community of practice that is formed in chat rooms takes on a different shape when learners are geographically more remote than being in the same computer laboratory.

Yet another issue related to autonomy is the absence or presence of the instructor in the chat room. An important issue in L2 learner discourse is who the interlocutors are, i.e., whether they are teachers of the L2 or native speakers, or other learners (Cazden, 1988, p. 199). A tendency exists in foreign language teaching methodology to view learner-teacher or learner-native speaker discourse as superior to learner-learner discourse. The logic behind such preference is that language teachers or native speakers are expert speakers of the L2 in which the learners are attempting to become proficient, and as such, language teachers or native speakers can serve as positive language models for learners. However, studies such as Donato (1994) show that learners can successfully complete tasks in the target language by means of mutual collaboration among themselves, with no teacher or native speaker present The learners in this study were rather evenly divided on the instructor presence issue. Many learners recognized that they were fully capable of maintaining a discussion in Spanish without the aid of the instructor, and they preferred that the instructor not be present. Others, however, preferred being able to rely on the instructor's language expertise and role as authority figure. Some of these were the same learners who, as described above, apparently viewed the chat room context as an extension of the classroom environment, which should operate under the same rules as the classroom. The other learners specifically preferred the differential, autonomous nature of chat room communication.

The learners reported having made use of several means of assistance that were available to them throughout their chatting experiences. While it is possible to access some of these forms of assistance in traditional classroom activities, especially in small group work, the nature of ongoing face-to-face discussion does not allow time to seek spontaneous assistance from sources other than the teacher or interlocutor. These learners were able to perceive the unique opportunities for assistance that chat room communication afforded them, and to make use of such assistance in a way that enhanced their electronic communication and helped them to appropriate chat room communication as a mediator of their L2 learning.

Instructor Perceptions

The issue of autonomy was also quite salient in many of the instructor's reported perceptions. The instructor noticed from the very first chat session that her role in chat room communication was transformed by the medium. At first she felt uncomfortable about this because she was socioculturally conditioned to believe that her job as a language instructor was to guide learners in producing accurate utterances in Spanish. After her initial experience in the chat rooms, she altered her communicative behavior with learners in light of her discovery that she would not be able to regulate chat room discussions in the same way that she regulated classroom discussions. This enlightenment was important for the instructor not only for its implications for chat room communication, but also for classroom communication. That is, the instructor came to recognize that the input/output model of SLA may not necessarily be the best model to follow in L2 instruction. In many instances, the instructor attempted to elicit certain language structures from learners by providing them the same structures in input, but to no avail. The learners often did not give the instructor the structures she wanted, unless she specifically requested them to do so. The learners successfully communicated their ideas in Spanish, however, without adhering closely to the input/output model of language acquisition and use.

Regarding the task issue, the instructor preferred the structured task from her own point of view, because the subtasks gave her a structure to which to adhere in directing learners in their discussions. She admitted, however, that the best conversations often evolved from open-ended tasks. Taking the learners' point of view, then, the instructor recognized and accommodated the communicative autonomy, which was a positive aspect of synchronous CMC in this study.

It is clear, then, that the instructor experienced at least as much growth throughout the study as her learners. Throughout the nine week study, she came to understand the differential nature of chat room communication, and to adapt her teaching beliefs and style to the new set of circumstances that this medium of communication afforded.

Upon learning more about the nature of chat room communication, the instructor believed that pedagogically, synchronous CMC would best be utilized as an out of class activity, and should perhaps even be turned over completely to the learners. In other words, the instructor did not feel that it was necessary for her to be present in the chat sessions. That this finding turned up in both learner and teacher perceptions is important. It lends strong credibility to the idea that autonomy is a positive factor in the use of synchronous CMC.

Regarding evidence of learning in the chat sessions, the instructor made speculations that the learners may have improved in their use of the subjunctive mood. Like the learners, however, she was not able to state anything concrete about their learning of specific grammatical structures or lexical items (beyond her "feeling" that such development may have taken place). Thus, while both learners and instructor recognized the positive effects of chatting on learners' overall fluency in Spanish, their perceptions regarding learning of specific features of the language were less than conclusive.

This chapter has presented an array of data relating to learner and teacher backgrounds and perceptions of the use of synchronous CMC as a language teaching and learning tool. In general terms, both learners and teacher reported having derived many benefits from participating in weekly chat sessions in the two intermediate Spanish classes involved in this study. The participants also related some perceived dislikes and disadvantages of chatting, but it appeared that they were able to overcome these as they appropriated the chat medium as a communicative tool. In many ways the teacher and learners coincided in their perceptions of synchronous CMC, which was also an important finding.

An interesting theme that appeared often in the data is that synchronous CMC provides a mode of communication in which control and responsibility for learning are transferred from the instructor to the learners. Such transfer of competence is a fundamental concept in the Vygotskian sociocultural framework that drives this study. The learner and teacher perceptions data presented in this chapter provided an emic perspective of interactional features in chat that were presented in Chapter 4, and provided insight into the learners' and teacher's personal experience with the synchronous CMC medium. These data are important in that they represent the participants in the study as active social agents, rather than limiting the study to the researcher's subjective interpretation of their communicative behaviors in the chat room context. The final chapter of data analysis will bring the study to full circle by illustrating issues of learner language development throughout the nine week period of the study.

CHAPTER 7

CHANGES IN LEARNER OUTPUT

This last chapter of research findings will complete the study by answering Research Question 5: "How does learner output change in the chat room over time?" The data analysis will begin with a frequency calculation of morphosyntactic features of learner language production during three chat sessions: Week One, Week Five and Week Nine. Then, three learners will be tracked more closely, in order to illustrate not only frequencies of morphosyntactic features, but also the accuracy rates of such features. The chapter will conclude with a discussion of findings.[12]

Whole Group Analysis

Changes in Production of Verb Morphology

For English speakers, mastery of the complex verb system is perhaps one of the greatest challenges of learning Spanish. The English verb system contains very few inflected verb endings and relies on modal auxiliary verbs to express time, tense, aspect and mood. In Spanish, however, all verbs are an inflected form of the root form: seven simple, or one-word tenses, and seven compound tenses. Five of the simple tenses are part of the indicative mood and the other two simple tenses are part of the subjunctive mood. Likewise, five of the compound tenses are indicative (although one of these tenses is no longer used in spoken language) and two are subjunctive. Each tense has six endings which reflect the subject of the verb: first person, second person, third person singular and plural (see Appendix G for a sample conjugation). There are three classes of verbs: -ar,

-er, and -ir, each with its own set of endings (although the -er and -ir class overlap a great deal). Additionally, there is a series of endings for the imperative mood, and inflection for the present and past participles. This adds up to a total of nearly 200 different verb forms to be learned. L2 learners of Spanish are first exposed to the present tense and are taught the other tenses gradually throughout their studies. By the end of a beginning (two semester) sequence, they are taught almost of all of the verb tenses and moods. Internalizing these forms and being able to produce them consistently, however, is often a very slow process. College level L2 learners of Spanish, for example, tend to overuse the present tense and/or the infinitive throughout at least their first two to three semesters of study, using these forms in contexts in which other tenses are obligatory. They also confound the person and/or number of the verb, combining a verb form with the wrong personal pronoun (i.e., * yo hablas *(I you speak),* *nosotros hablan *(we they speak)*, etc.).

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[12] In the discussion, no conclusions for *cause* will be drawn.

Given both the complicated nature and the iimportance of verb acquisition in L2 Spanish, this phenomenon was selected for analysis of changes in learner output. This section will present an analysis of use of the various verb forms by all learners in three chat sessions: week one, Week Five and Week Nine.

Explanation of Verb Production Tables

Table 7.1 presents the frequency of occurrence of verbal morphosyntactic features. A few notes are in order regarding the calculation of frequencies in Table 7.1, as well as the tables which follow. First, the frequencies are reported for each chat room, each of which was used by two groups (the 11:00 class and the 12:00 class). The data are presented in this way to show some detail of the distribution of total frequencies. Second, the subordinate clause category is not calculated in the totals, as the verbs within the subordinate clauses were calculated according to their respective tenses. For this reason the subordinate clause frequencies appear in brackets. Subordinate clauses are embedded clauses that function as noun complements, adjective phrase complements or adverb complements. They are presented here because they indicate the use of complex, rather than simple sentences. Finally, the instructor's frequencies are presented for comparison purposes only. These frequencies are also reported in brackets. Following Table 7.1 is a commentary on Week One data.

TABLE 7.1

Verb Morphology in Learner and Instructor Output: Week 1

	Room 1	Room 2	Room 3	Room 4	[Instr]	Total
Infinitive	47	35	22	17	[20]	121
Tense						
Present	236	224	144	107	[64]	711
Pres. Prog.	6	1	1	11	[1]	19
Preterite	5	7	19	9	[11]	40
Imperfect	1	3	0	1	[1]	5
Pres. Perf.	0	1	1	2	[0]	4
Future	0	4	1	1	[1]	6
Condit.	0	4	1	1	[2]	6
Mood						
Pres. Subj.	0	3	1	2	[3]	6
Imp. Subj.	0	1	0	1	[2]	2
Imperative	2	4	1	3	[8]	10
Voice						
Passive	0	1	0	0	[0]	1
Clauses						
Subord.	[25]	[27]	[12]	[8]	[8]	[72]
Total	297	289	191	155	[113]	931

Commentary on Week One

First, it should be noted that the assigned task did not provide grammatical support nor suggestions to use any particular tense. In the subtasks of the structured activity, however, the conditional and the present perfect were each used one time in content questions.

The most salient finding in Table 7.1 is that the overwhelming majority of verbs used were simple present tense forms. In fact, only 99 of a total of 931 verbs (10.6%) were non-present tense. The instructor, by comparison, used non-present verb tenses in 25.7% of her total verb forms. There are two possible explanations for this pattern, one speculative and the other observed by the researcher in the chat room transcripts. The speculated reason is that learners preferred or felt more comfortable discussing issues that were part of their "here and now", i.e., tangible, observable, non-abstract topics. The observed phenomenon is that learners overgeneralized the present tense to obligatory contexts for other tenses. For example, instead of asking, "*Have you seen* the movie...?" or "*Did you see* the movie...?", they would say "*You see* the movie...?". Limiting themselves to the simple present tense, learners are only able to report actions (or states of being) that are part of present reality. They are not able to discuss the past, the future, progressive actions that occur at any time, nor conditional or hypothetical actions. While the present tense is probably the most used in any given conversation, the fact that the native-speaking instructor employed other tenses more than twice as often as the learners indicates that learners are probably under-using other tenses.

Of the non-present tenses, the most frequently used were the preterite (38 occurrences), followed by the present progressive (19 occurrences). Two interesting patterns evolved within these categories, which were observed in the transcripts from which the data in table 7.1 were taken. First, 7 of the 19 occurrences of the present progressive appeared within 13 consecutive lines of text, and 5 of them were used by the same learner. Similarly, the occurrences of the preterite tense appeared in concentrated areas of the transcripts, and many of the occurrences originated from the same person.

The other verb tenses were all used very infrequently, from one to ten times each per room.

The relatively low occurrence of subordinate clauses (72) suggests that learners tended to limit themselves to simple sentences rather than embedding dependent clauses in their sentences. Many of the verbs that were used in the subordinate clauses were verbs of thinking/believing. Sometimes learners expressed their thoughts or beliefs in a way that did not require a subordinate clause. Following are two examples of this taken from Episode 1A:

Example 1: "bueno chamo ustedes tienen mucha libertad en los estados unidos (*well guy you have a lot of freedom in the united states*)

Example 2: "Para mi, la libertad es... (*For me, freedom is...*)

It is difficult (and perhaps irrelevant) to establish whether the non-use of subordinate clauses might be avoidance on the part of the learners, or if learners consciously made use their L2 linguistic repertoire to express ideas in a variety of ways.

This initial chat session serves as a baseline to which sessions in Week Five and Week Nine will be compared. Table 7.2 presents a profile of learner verb production for Week Five.

TABLE 7.2

Verb Morphology in Learner and Instructor Output: Week 5

	Room 1	Room 2	Room 3	Room 4	[Instr]	Total
Infinitive	31	64	30	40	[27]	165
Tense						
Present	211	304	162	234	[121]	911
Pres. Prog.	3	4	2	2	[9]	11
Past Prog.	0	0	1	3	[0]	4
Preterite	6	30	24	16	[20]	76
Imperfect	14	10	4	9	[7]	37
Pres. Perf.	1	7	4	2	[4]	14
Past Perf.	0	0	1	1	[2]	2
Future	6	1	2	2	[1]	11
Condit.	2	2	2	7	[3]	13
Mood						
Pres. Subj.	1	6	1	0	[6]	8
Imperative	0	3	1	6	[4]	10
Voice						
Passive	1	0	0	0	[0]	1
Clauses						
Subord.	[13]	[17]	[10]	[15]	[13]	[55]
Total	276	431	234	320	[204]	1,263

Commentary on Week Five

Compared to Week One, the most noticeable differences in verbal morphology are a large increase in the total number of verbs produced as well as a large increase in the occurrences of non-present tenses. Of a total of 1,263 verbs, 187 of them were non-present tense, an increase from 10.6% in week one to 14.8% in Week Five. The instructor used non-present tenses 27.9% of the time, a very slight increase over week one.

As in Week One, the most frequently used non-present tense in Week Five was the preterite (76 occurrences), followed by the imperfect (37 occurrences). Even though the preterite and imperfect were the most commonly used non-present tenses in Week One, they were still used relatively infrequently. There was a large increase in Week Five. A possible explanation for this is that Week Four's structured task included grammatical support for the preterite and imperfect. Within the preterite category, most of the occurrences were in rooms 2 and 3. The occurrences were spread among several learners rather than just 1 or 2 (as observed in the transcripts). In room 1, where the imperfect was used relatively often, these uses were traced largely to 2 individual learners. It should be noted that in rooms 1, 3 and 4, the assigned structured task included grammatical support for the conditional tense and the imperfect subjunctive combined in "if" clauses. The frequency data does not show any occurrences of the imperfect subjunctive, however, and no significant increase in use of the conditional tense.

Another interesting figure in Table 7.2 is a decrease in the number of subordinating clauses used. In Week Five there were 55 subordinating clauses, a decrease of 21 clauses from Week One. This indicates that learners used more simple sentences and less complex sentences this week than in Week One.

Table 7.3 presents verbal morphology figures for Week Nine of the study.

TABLE 7.3

Verbal Morphology in Learner and Instructor Output: Week 9

	Room 2	Room 3	Room 4	[Instr]	Total
Infinitive	44	59	52	[37]	155
Tense					
Present	211	283	216	[107]	710
Pres. Prog.	4	6	3	[6]	13
Past Prog.	0	3	0	[0]	3
Preterite	25	24	7	[4]	56
Imperfect	2	6	2	[3]	10
Pres. Perf.	0	2	1	[7]	3
Past Perf.	0	3	0	[0]	3
Future	8	27	11	[15]	46
Condit.	1	2	3	[0]	6
Mood					
Pres. Subj.	1	9	4	[7]	14
Imp. Subj.	0	0	0	[1]	0
Imperative	2	3	0	[8]	5
Voice					
Passive	0	2	0	[0]	2
Clauses					
Subord.	[28]	[68]	[57]	[19]	[172]
Total	298	429	299	[195]	1,026

Commentary on Week Nine

Week Nine data show a similar pattern to the previous weeks in that the majority of the verbs used were infinitives and present tense. There was another slight increase in use of non-present tense verbs over Week Five, however. Of 1,026 verbs used this week, 161 of them were non-present tense, an increase to 15.7% over Week Five's 14.8%. The instructor used non-present tenses 26.1% of the time (51 out of 195 total verbs), consistent with her non-present tense usage in both Weeks One and Five.

The preterite is again the most commonly used non-present tense (56 occurrences), followed this time by the future (46 occurrences) rather than the imperfect tense. This is undoubtedly due to the fact that the topic for this week was the future of society, and the structured task included grammatical support for the future tense. The use of future tense was spread among several learners rather than just 1 or 2 learners. A striking figure in Table 7.3 is the large increase in the number of subordinate clauses this week (172 compared to 72 in Week One and 55 in Week Five). The explanation for this might be that the assigned topic involved making predictions for the future. In order to make predictions, it is typical to say something like, "I think that...". It appears that learners made their predictions this way rather than avoiding subordinate clauses.

To conclude this presentation of verbal morphology data, Table 7.4 presents a summary of findings for weeks one, five and nine.

TABLE 7.4

Summary of Verbal Morphology in Learner Output: Weeks 1, 5, 9

	Week 1	Week 5	Week 9	Total
Infinitive	121	165	155	441
Tense				
Present	711	911	710	2,332
Pres. Prog.	19	11	13	43
Past Prog.	0	4	3	7
Preterite	40	76	56	172
Imperfect	5	37	10	48
Pres. Perf.	4	14	3	21
Past Perf.	0	2	3	5
Future	6	11	46	63
Condit.	6	13	6	25
Mood				
Pres. Subj.	6	8	14	28
Imp. Subj.	2	0	0	2
Imperative	10	10	5	25
Voice				
Passive	1	1	2	4
Clauses				
Subord.	[72]	[55]	[172]	[299]
Total	931	1263	1026	3,220

Commentary on Weeks One, Five and Nine

Conflating the verbal morphology data into one table, one can see the patterns of verb usage across weeks one, five and nine. What was consistent throughout the study was that the present tense and infinitive verbs represent the most widely used verb forms. Non-present tenses were used relatively infrequently during all three weeks. Beyond this consistency, a number of different patterns emerged from the data.

First, the total number of verbs fluctuated from week to week. In Week One, the learners used a total of 931 verbs. In Week Five this number increased drastically to 1,263, only to decrease in Week Nine to 1,026. There are a few explanations for this. The first is that there was less overall conversation in weeks one and nine, which had an impact on the overall number of verbs produced. This explains the increase from Week One to Week Five. In Week One, the word count of the overall conversations in all eight rooms (including learner and instructor names and the instructor's input) was 7,551 words. In Week Five the total word count jumped to 11,259, which seems to explain the increase in total verbs produced from 931 in Week One to 1,263 in Week Five. In Week Nine, however, the total word count was 6,925, the lowest of all three weeks. The total verb count was 1,026, which was higher than Week One. The explanation for this finding is that in Week Nine, the learners put forth a larger number of verbless utterances than in other weeks. Many of the utterances in Week Nine include short, verbless utterances, as well as repetition of content of previous utterances; but without using a verb (ellipsis). Ellipsis can be a sign of language development in the sense that competent speakers of a language know what they can ellipse in an utterance and what they can't, in order to produce a grammatically acceptable and understandable utterance. Ellipsis can also be a sign of avoidance of structures such as verb forms, however, especially in L2 learners. Therefore, it is very complicated to ascertain whether the verbal ellipsis in this data is a function of development or of avoidance. There is also a strong possibility that ellipsis in this particular study is a function of the medium of communication. Chat room communication in general is often characterized by shortcuts that serve to speed up the communication. Thus, learners in this study may have consciously made use of ellipsis to adapt their communication to the communicative environment.

Another notable pattern that evolved was the increase in use of non-present tenses. The increase from Week One to Week Five was quite notable (4.2%). From Week Five to Week Nine there was also a slight (.9%) increase. Week Nine's increase to 15.7% use of non-present tenses shows an approximation, from Week One to Week Nine, to the instructor's 26.1%, which was near consistent across all three weeks.

The preterite was the second most frequently used tense, after the present. Across all three weeks the preterite was used more than any other non-present tense, especially in Week Five. Following the preterite was the future tense, with 63 total occurrences throughout the study. Forty-six of these occurrences were in Week Nine, the assigned topic of which elicited the production of future tense verbs. Other verb tenses (and moods) that emerged with notable frequency are the imperfect, the present subjunctive, the imperative, the present progressive and the conditional. Some of these occurred because the assigned tasks elicited them, but others evolved out of natural conversation. The present progressive and the imperative mood, for example, were never elicited in any of the assigned activities. Many of the uses of the imperative were a part of the joking and role playing that were described in Chapter 4.

Finally, the use of subordinate clauses decreased from Week One to Week Five, but drastically increased in Week Nine. This pattern suggests that learner output did not necessarily become more complex in terms of increased use of complex sentences, but rather that the assigned topic of Week Nine elicited an elevated number of subordinate clauses.

In summary, the main finding regarding learner use of verbal morphology is that in time learners began to move gradually beyond their overuse of the present tense, employing other verb tenses in their chat room communication. While this presentation of verbal morphology in terms of the overall group sheds some light on Research Question 2, the next section will illustrate changes in output with more detail, focusing this time on three individual learners.

Changes in Output: Learner Profiles

In order to provide a more detailed account of changes in output, three learners were selected for detailed profiling of their use of Spanish verb morphology. The profiles go beyond frequency of occurrence of verb tenses to include accuracy of verbal morphology and variety of lexical entries. The three learners were selected based on a profile of their verb usage in Week One.

Benito made accurate use of a wide variety of verb forms in this session, indicating that he may have already acquired many of the tenses and moods prior to the study. Adia did not go beyond the present tense and infinitive structures (except for one improperly formed subjunctive; it is even doubtful that she *intended* it to be a subjunctive), which made it interesting to see if her pattern of verb use would stay the same or show increased use of non-present tenses as the overall learner population did. Lourdes went beyond the present tense on a few occasions in Week One, but produced very few verbs overall and had a very high accuracy rate. Since these three learners manifested different types of profiles in Week One, the researcher believed that it would prove informative to see how each changed throughout the study.

Adia

Table 7.5 shows Adia's usage of verbal morphology in her chat room output in weeks one, five and nine.

TABLE 7.5

Verbal Morphology in Learner Output: Adia

	Week 1		Week 5		Week 9	
	Verbs	Correct	Verbs	Correct	Verbs	Correct
Infin.	8	8	17	7	10	8
Tense						
Present	52	41	49	40	32	29
Pres. Prog.			1	1		
Preterite			2	0		
Imperfect			7	6		
Pres. Perf.			1	0		
Future					6	4
Condit.			1	1		
Mood						
Pres. Subj.	1	0	1	0	3	1
Imperf. Subj.						
Clauses Subord.	[8]		[8]		[11]	
Total	61	50	79	55	51	43

Adia's verb usage manifests some interesting patterns. First, in Week One she did not go beyond the present tense and the infinitive (except for the one incorrectly formed subjunctive), but she had a relatively high accuracy rate with the verbs that she did use (82%). In Week Five she utilized six other tenses and moods 16% of the time, with varying degrees of accuracy. She produced her highest amount of verbs in this session, but had the lowest accuracy rate of all three weeks (70%). Interestingly, her accuracy in use of infinitives was very low in Week Five, compared to the other weeks. This was partly a function of using adverbial clauses beginning with *when,* and using the infinitive form instead of the appropriate verb tense. In Week Nine she used non-present tenses 18% of the time, also with varying degrees of accuracy (the future tense was specifically elicited by the assigned task for that week). She produced the fewest number of verbs this session, but had the highest overall accuracy (84%). Her usage of subordinate clauses was rather consistent, with eight clauses in weeks one and five and eleven in Week Nine. This relatively low number indicates that Adia produced mainly simple rather than complex sentences.

Adia's overall pattern of verb usage resembled the group profile in some ways, First, she produced the greatest amount of verbs in Week Five, which had a very popular topic and elicited the most overall language output in all of the groups. Because she produced the most verbs in Week Five, this gave Adia a chance to produce more tenses and moods, even though she did so with less accuracy than when she limited herself to the present tense.

Regarding variety of lexical entries for verbs, Adia used 16 different verbs in Week One, 29 verbs in Week Five, and 20 verbs in Week Nine.

Benito

Table 7.6 shows Benito's usage of verb morphology during chat sessions in Week One, Week Five and Week Nine.

TABLE 7.6

Verbal Morphology in Learner Output: Benito

	Week 1		Week 5		Week 9	
	Verbs	Correct	Verbs	Correct	Verbs	Correct
Infin.	12	11	18	18	22	20
Tense						
Present	54	51	76	72	62	61
Pres. Prog.	1	1	1	1		
Preterite	2	2	2	2	1	1
Imperfect	2	2	4	3	1	0
Pres. Perf.			5	5	2	2
Future	2	2				
Condit.	1	1	1	1		
Mood						
Pres. Subj.	2	1	1	1	3	2
Imp. Subj.	1	1				
Imperative	1	1				
Clauses						
Subord.	[14]		[14]		[18]	
Total	78	73	108	103	125	119

It can be seen that Benito already had an extensive repertoire of verb tenses and moods within his Spanish proficiency before the study began. In Week One he used non-present tenses 15% of the time (5% higher than the group average) and had a very high, 94% accuracy rate. His verb production even included use of the subjunctive mood, a structure that is typically acquired later than the fourth college semester of L2 Spanish. Unlike the whole group, Benito's production increased steadily across all three weeks, rather than peaking in Week Five. He therefore increased from an overall verb production of 78 verbs in Week One to 125 verbs in Week Nine, with a consistent accuracy rate of 95% in weeks five and nine. His use of subordinate clauses also increased slightly in the last week of the study. In Week Five he only utilized non-present tenses 13% of the time, but in Week Nine he did so 18% of the time, which is higher than the other weeks and is also relatively close to the instructor's 26%. As far as lexical items, Benito used 25 different verbs in Week One, 34 verbs in Week Five and 29 verbs in Week Nine.

Lourdes

Lourdes' use of verb morphology in weeks one, five and nine is illustrated in Table 7.7

TABLE 7.7

Verbal Morphology in Learner Output: Lourdes

	Week 1		Week 5		Week 9	
	Verbs	Correct	Verbs	Correct	Verbs	Correct
Infin.	5	5	7	7	2	2
Tense						
Present	19	19	40	34	28	23
Pres. Prog.						
Preterite			31		3	2
Imperfect			31			
Pres. Perf.	1	1				
Future	1	1			4	2
Condit.	2	1	1	1	4	2
Mood						
Pres. Subj.					10	
Imp. Subj.						
Imperative			1	0		
Clauses						
Subord.	[2]		[8]		[7]	
Total	30	29	54	43	42	31

What is perhaps immediately noticeable in Lourdes' verb production is the low overall quantity of verb forms produced as compared to the other two learners. In Week One she ventured beyond the present tense four times out of a total of 30 verbs (13%). She had her highest accuracy rate in Week One. The low number of total verbs produced and the high accuracy rate give the appearance that accuracy was important for her in the initial week. In Week Five she produced her highest number of verbs, as did the overall group, with an 80% accuracy rate out of 54 total verbs. Only five of the 54 verbs were non-present tense (9%). In Week Nine her total production decreased to 42 verbs. Her accuracy also decreased again, but her use of non-present tenses increased to nine total verbs or 21%. Unlike Week One, she utilized non-present verb tenses fairly often, risking a decrease in accuracy. She produced very few subordinate clauses, especially in Week One, which shows that she limited herself mainly to simple rather than complex sentences. Lexically, Lourdes used 18 different verbs in Week One, and 23 different verbs in Week Five and in Week Nine.

Summary

The learner profiles of Adia, Benito and Lourdes show the variety of verb morphology that they employed in their chat sessions, as well as the accuracy of their verb forms. Taking a closer look at three specific learners has demonstrated that each learner has a different profile of verb usage. In some ways these learners follow the general patterns of verb usage of the group of which they are a part, but in some ways their individual verb usages were different. The discussion below will explore some implications of the patterns of verb morphology uncovered in the data analysis in this chapter.

Discussion

Changes in learner output in weekly chat sessions can be looked at in a variety of ways. The selection of verbal morphology for analysis in this study was somewhat arbitrary but appropriate, given that mastery of the Spanish verb system is both challenging and essential for English speaking learners of L2 Spanish. In the whole group analysis in this study, the most notable trend was that learners used the present tense and infinitive verb forms during most of their chat room communication. Throughout the study, however, their use of non-present tenses increased from 10% in Week One to 15% in Week Five and 16% in Week Nine. This suggests that the learners showed some development in their use of non-present verb tenses over time. To verify if this trend would have continued, of course, would have require additional weeks of chat sessions. The other salient feature of whole group verb use is that the greatest production of verbs, as well as overall production according to a calculated word count, was in Week Five. In Chapter Six it was seen that the topic of Week Five, music, was popular among a large number of learners. This suggests that learners had more to say about this topic, and thus produced more verb forms.

After the whole group analyses, 3 learners were tracked to observe their individual patterns of verb usage. These 3 learners each manifested similarities and differences as compared to each other and to the overall group. It was also shown that the learners utilized the various verb forms with differing degrees of grammatical accuracy. These learner profiles provided a snapshot of learner production during communicative language use.

In the traditional SLA literature, grammar is often seen as a fixed, complete set of grammatical rules that are waiting for acquisition. Looking at the data in this study, for example, it could be concluded that the learners are all in intermediate stages of full acquisition of the Spanish verb system. Full acquisition would be the mastery of all verb forms, which would be manifested in accurate production of these forms. Benito, for example, would be closer than the other 2 learners to acquisition of the complete system, since he used a larger number of forms than the others, and demonstrated a higher degree of accuracy.

In the chat sessions in this study, learners communicated extensively on a number of topics, and in the process produced a variety of verb forms. Although accuracy was not calculated in the whole group analysis, the high use of the present tense suggests that learners overgeneralized the present tense, using it in contexts in which other tenses or moods were obligatory. However, learners were able to make themselves understood by means of their less-than-perfect accuracy of production of Spanish verb forms.

An alternate view to the a priori view of language as a closed fixed code linking preexisting forms to preexisting meanings is Hopper's (1998) *emergent grammar* (EG). According to Hopper, "grammar" is one of a series of repetitions in language, along with lexical and idiomatic repetitions. As such, grammar is not a single delimited system, but rather an open-ended collection of forms that are perpetually restructured and resemanticized during actual use (Hopper, 1998, p. 159).

The EG perspective is a helpful theory to employ in explaining the chat room communication that occurred in this study. In the group and learner profiles, it was seen that learners manifested certain patterns in their use of Spanish verb forms. While it was noted that learners "overgeneralized" the present tense in obligatory contexts for other tenses and moods, and further that the accuracy of their verb forms varied, learners were able to establish mutual understanding with each other, which allowed for continued communication. As such, learners may have used the present tense in circumstances that clearly did not belong to the present tense verb formation in Spanish, but nevertheless they were able to make themselves understood by means of their patterned use of a verb system that resembled the standard Spanish verb system, even if not accurately imitating such system. For those learners at that time, overuse of the present tense was the reality of the shape of their L2 Spanish grammar. Whether or not the L2 grammar of these learners would in time continue to approximate that of the (idealized) native speaker is somewhat irrelevant to their current, ongoing use of the L2. The important thing is that learners use the linguistic resources currently available to them to find the means to continue to communicate their ideas in the L2 as their grammar develops.

Each individual has a distinct mental grammar, whether it be an L1 or L2 grammar. Thus, speakers negotiate, as they speak, what their words should be taken to mean (Johnstone, 1996, p. 173). In Chapter Four of this dissertation it was seen that learners utilized communicative strategies that allowed them to establish and maintain communication in Spanish, however "imperfect" their grammars may have been, and with little or no reliance on English, their common L1. They learners brought their own personal histories and life experiences with them to the communicative context, which had important influences on their chat room communication. Sociocultural theory was useful in explaining the dynamics of chat room discussion among the learners in this study. The EG view is consonant with the sociocultural view of language, as the following citation suggests:

> In EG, in which forms are seen as distributed over time, and as being exchanged between speakers, there is an emphasis on the linear, i.e., syntagmatic arrangements of forms, with less inclination to seek all-encompassing generalizations, and even less to attribute these generalizations to an individual 'mind'(Hopper, 1998, p. 162).

Emergent grammar and sociocultural theory, then, seem to be compatible lenses through which to view the use and development of grammatical structures in the context of this study, in that both views suggest that the patterns governing the use of grammatical form are derived from social use rather than from a prediscourse set of grammar rules.

Sociocultural SLA theory can offer some insight into the relationship between the differing verb morphology profiles among learners and the dynamics of communicating (and perhaps learning) within the chat room environment. Many sociocultural studies have made reference to the concept of transfer of competence during collaborative discourse (e.g., Adair-Hauck & Donato, 1994; Donato, 1994; Guerrero & Villamil, 1994; Guerrero & Villamil, 2000). In these studies, learners in higher states of regulation have been shown to discursively transfer knowledge and/or communicative competence to learners in lower states of regulation or with lesser knowledge than their peers. Donato's learners, for example, collectively scaffolded each other and completed a communicative task by piecing together bits of knowledge that each individual possessed. In the verbal morphology profiles of the learners in this study, it was noted that each learner made differential use of Spanish verb forms, and therefore most likely possess different internalizations of the Spanish verb system. It is also likely the case that in the chat room context learners drew upon the verb use of other learners, given the salience of the written text on the computer screen. The researcher noted that on several occasions, for example, when one individual made use of a non-present tense verb, there was a high concentration of that particular tense or mood in the lines of text immediately following the original use of such form. This may have happened because learners repeated one learner's use of the given form. The following example, taken from Episode 1G, will illustrate such repetition using the present progressive:

Example 1:

S1: "estoy tratando a ver los constituciones...estoy mirando la constitucion de Argentina" (*I'm trying to see the constitutions...I'm looking at the constitution of Argentina*)

S2: "estoy mirando la constitucion de la republica dominicana...Estoy leyendo la constitucion de la republica dominica" (*I'm looking at the constitution of the dominican republic...I'm reading the constitution of the dominican republic*)

Of course, it is difficult to ascertain whether S2 knew the present progressive forms beforehand or whether she picked them up by imitating S1. It may be the case, though, when these high concentrations of certain verbs forms occurred in the chat transcripts, that learners picked up these forms by imitating other learners. Thus, if different learners have knowledge of the use of different verb forms, then collectively these learners have access to a wide variety of verb forms in the chat room context. What remains to be seen (which is outside the scope of this study) is if learners *internalize* verb forms that they pick up from other learners in chat room communication.

In addition to imitating each other in the chat rooms (assuming that their utterances *were* repetitions of each other), learners also overtly corrected each other, as Example 2 (from Episode 9F) illustrates:

Example 2:

S1: "No pienso que Bush va a ganar" (*I don't think Bush is going to win*).

S2: "no piensas que Bush 'vaya' a ganar" (*You don't think Bush is 'going' to win*).

S1: "Gracias...No pienso que Bush vaya a ganar" (*Thank you...I don't think that Bush is going to win*).

S3: "pienso que bush vaya a ganar" (*I think Bush is going to win*).

In this example, S1 let S2 know that she should have used the subjunctive verb form after her expression of doubt. Following this overt correction, S2 restated her utterance in correct form. What is interesting, however, is that S3 also took up the correction, but used the subjunctive form within a clause that did *not* express any doubt, and therefore did not call for the subjunctive. This brings up an important point: when learners imitated each other, they sometimes used correct grammatical forms and at other times used incorrect forms (or lexical entries). To illustrate, Example 3 shows imitation of incorrect forms taken from Episode 1D of the transcripts:

Example 3:

S1: "busco por costa rica" (*I look for costa rica*).

S2: "yo busco por peru" (*I look for peru*).

The correct way to state their intention to look for something is *Voy a buscar...* The verb *buscar* in Spanish does not use the preposition *for* after it as in English, and to project into the future it is necessary to use the *voy a* construction. Thus, S1 copied from S2 an incorrect way to express this idea. This pattern repeated itself a few lines later in the same episode, as shown in Example 4:

Example 4:

S1: encuentro costa rica! (*I find costa rica!*).

S2: encuentro peru, ... (*I find peru, ...*)

This is an example of the use of the present tense in a context that required the preterite tense. The correct verb would have been *encontré*. S2 once again copied an incorrect form from S1. In a study of face-to-face interaction, Porter (1986) found that as little as 3% of learner errors could be traced to repetition of other learners. This suggests that learners, at least in the face-to-face context, tend to *not* repeat incorrect grammatical forms (Porter, 1986). Although it is outside the scope of this study to formally measure incorrect repetitions of grammatical form, instances of incorrect repetitions were observed in the transcripts. It may be that the increased saliency of the written text on the computer screen contributed to the observed incidences of repeating incorrect (as well as correct) structures in this study.

It has been documented that participants in electronic discourse tend to emulate each other (Davis & Brewer, 1997). While it may not be the most desirable circumstance that learners emulate other learners' incorrect utterances, this finding is not necessarily a negative one. L2 learning and use is at times a guessing game for learners. Upon receiving oral or written input, for example, learners are faced with the task of piecing together bits of language into coherent units of meaning. This often involves making educated guesses as to the meanings of certain words or expressions. The problem with such guesses, of course, is that they could be wrong. Until proven wrong, however, the learner might maintain the guessed information in her or his emergent grammatical system. In the event that learners appropriate incorrect language information from other learners, then, they may also maintain this incorrect information in their grammar system, until they come across counter evidence that causes them to restructure their previous knowledge. Because learners may acquire non-standard forms from other learners, many language teachers refrain from engaging learners in collaborative discussion with each other without the presence of a more knowledgeable language model, such as the teacher or a native or advanced speaker. What remains to be demonstrated in SLA research, however, is whether everything a learner hears and sees becomes a part of her or his L2 emergent grammatical system.

This researcher wishes to argue that the benefits of collaborative learner-learner discourse outweigh the drawbacks, even in the chat room context where learner errors may be more salient than in face-to-face conversation. By participating in 45-minute weekly chat sessions, learners gain a great deal of language practice, which they self-reported to have had a positive effect on their growing Spanish fluency. Learners might stand as much, if not more, of a chance to impress upon each other correct features of the L2 than they do to exchange incorrect forms. The appropriation of any incorrect L2 utterances may very well become restructured in subsequent positive or negative language evidence provided during learner-learner or learner-teacher discourse. The restructuring of knowledge is, after all, what learning is all about.

The emergent grammar perspective may bring some insight into the issue of (idealized) grammatical accuracy in L2 communication. If it is the case that the grammar of any given language is in a constant state of change (among native speakers), then it could be argued that there are no absolutes in terms of what is the "correct" versus the "incorrect" grammar, for native speakers and/or L2 speakers of the language. As Firth and Wagner argue, native speakers and non-native speakers are not homogeneous linguistic groups, therefore "interlanguage" should not carry the connotation of an imperfect grammar. Example 2 with the subjunctive in Spanish serves as an illustration of this. There is variability in use of the subjunctive among native speakers of Spanish, even though traditional grammars form explicit rules of when to use and when not to use the subjunctive. Therefore, the subjunctive system is not absolute or stable among L1 speakers of Spanish. Perhaps the same fluidity in the grammars of L2 speakers should be seen as a parallel situation to that of L1 speakers, in that the patterns of use of grammatical structures are shaped by the social use of such structures. In both the L1 and L2 context, patterns of use change with time and both within and among individual speakers.

This chapter has provided data analysis of learner production of Spanish verb forms and has discussed some implications of an (L2) emergent grammar view for the data obtained in this study, suggesting that emergent grammar is consonant with a sociocultural view of language learning. Containing the last component of data analysis regarding the use of synchronous CMC as mediator of L2 learning, this chapter has also brought this study of synchronous CMC in the intermediate Spanish context to full circle.

CHAPTER 8

CONCLUSION

This chapter will summarize the findings of the study, as well as highlight conclusions that can be drawn from the study, point out strengths and limitations of the study, discuss implications for foreign language pedagogy, and make recommendations for future research.

The purpose of this case study was to explore, within the framework of Vygotskian sociocultural theory (SCT), the use of synchronous CMC as mediator of L2 use and learning in an intermediate-level college Spanish course. Five research questions were the basis of this investigation. First, outstanding interactional features of the chat room environment were illustrated and explained. Second, the effects of open-ended versus structured communicative tasks on chat room communication were analyzed. Third (and fourth), learner and teacher perceptions of the use of chat were reported and explained. Finally, changes in learner production of Spanish verb forms were analyzed.

Throughout the study, fundamental constructs of SCT and related constructs were invoked in order to describe and explain how L2 use and learning in the chat room context are shaped by the social environment. The most important of these constructs were intersubjectivity, defined as a state of shared understanding in communication; community of practice (or discourse community), a place in which individuals are united by communicative interaction and performance of common activities; activity theory, which explains how different individuals carry out the same (research or pedagogical) task in different manners; the idea of learner as a social individual with her or his own set of beliefs, assumptions and expectations; and finally, emergent grammar, an alternative manner of viewing the grammatical system of a language in terms of patterns that develop in discourse, rather than as an absolute, closed set of pre-discourse patterns.

Summary of Findings

Data analysis of Research Question 1 uncovered a number of interactional features specific to the discourse community created by the participants in the study. This part of the study employed the concept of intersubjectivity to help illuminate the extent to which learners achieved and maintained mutual understanding during their chat sessions. The findings were that learners can and do achieve mutual understanding, or intersubjectivity in their L2 in the chat room context, in spite of their limited proficiency and the challenge of focusing on a common topic when there are often several concurrent strands of conversation in the chat room.

This section of the study has made a number of original contributions to the ongoing exploration of the concept of intersubjectivity in SCT. First, using discourse analysis as a research tool, this study explored extensively the concept of intersubjectivity as it occurred in moment-to-moment interaction, illustrating the fluid and fragile nature of intersubjective communication. Second, the study illuminated the construct within an electronic communicative environment, a context that provides a different set of circumstances than that of face-to-face conversation. Finally, the study illustrated the shape of intersubjective communication among groups of persons rather than within dyads, which are usually the subject of sociocultural SLA studies that apply the intersubjectivity construct (e.g., Antón, 1998; Brooks, 1994).

Analysis of Research Question 1 has also demonstrated the fact that learners of intermediate Spanish can form unique, self-contained discourse communities, bound by common tasks, interests, and technology. Within this discourse community of language practice, learners can interact effectively, build on the ideas of others, and utilize phatic communication that the L2 classroom does not often afford them the opportunity to use. The significance of this particular discourse community was that the learners appropriated the chat room environment and utilized it as a forum of communication in Spanish, all the time molding the chat room environment to their communicative needs and desires.

Research Question 2 brought some insight into the issue of communicative task assignment in the chat room environment. Although mainstream SLA research and the growing SCT framework focus on different pieces of the SLA puzzle, they share a belief in the importance of the task as a unit of analysis in SLA. In the interactionist literature on task-based instruction, communicative language tasks serve the purpose of planning language input and output in an effort to encourage learner use of specific language structures and/or lexical items. An important finding in this study, however, was that specific input, interaction and output are difficult to determine ahead of time while designing a communicative language task, especially in the synchronous CMC context. Although some learners in this study performed their structured language tasks in the synchronous CMC environment according to the goals of the input/output metaphor, of greater interest was the manner in which learners internally constructed the tasks during interaction, rather than adhering completely to the externally defined demands of the tasks. The sociocultural view of the L2 learner is that of a social being whose identity, beliefs and assumptions will emerge (when allowed to) during collaborative L2 discourse. Activity theory helped to explain how learners went about performing communicative tasks in the synchronous CMC context according to their own set of beliefs about the expectations of the task, as well as their own goals and their particular manner of carrying out their goals.

Upon analyzing the assigned weekly tasks from an activity theoretical perspective, it was found that when learners internally constructed the assigned tasks during their interaction, the result was sometimes rather different than what was intended when the task was designed. Learners often discussed the steps of the task out of order, skipped steps, and did not utilize the targeted grammatical structures in the task. This corroborates previous SCT research findings regarding learner performance of research and pedagogical SLA tasks (e.g., Brooks, 1994; Coughlan, 1994). Because different groups constructed the assigned tasks differentially, it was found that the assignment of an open-ended versus a structured task had very little effect on the communication that occurred in the respective groups. That is, it was not often apparent from reading transcripts, whether the group had been assigned an open-ended or a structured task.

When designing tasks for L2 use and instruction, the separate issues of accuracy, complexity and fluency should be taken into account (Skehan, 1998). The data illustrated in this study indicated that learners benefitted from discussion of the assigned tasks (as well as off-task discussion) in terms of fluency, and to some extent, complexity. Regarding accuracy of specific language structures or lexical items, however, the empirical data in this study suggest that the chat room environment may or may not be best suited for this aspect of SLA (see recommendations for further research).

The emic, or participant perspective, is crucial to both a sociocultural analysis of SLA and to the qualitative research tradition to which this study belongs. Research Questions 3 and 4 utilized post-study questionnaires and follow-up interviews as research tools to glean learner and teacher perceptions. This emic perspective both supported and built upon other types of data analysis in the study. This part of the study allowed the voices of the participants to tell their account of their experiences with the synchronous CMC medium in their intermediate Spanish class. Both learners and the teacher provided an array of information that allowed the study to explore the language mediational capacity of synchronous CMC from an insider's point of view, which complemented the chat room transcript data analyzed by the researcher.

Overwhelmingly, the learners and the teacher enjoyed their experiences in the chat rooms. Two issues specifically stood out. The first was that of fluency. Most of the learners reported that they felt the extensive practice communicating in Spanish boosted their fluency in the language. The other important issue that stood out was that of communicative autonomy. It seems that the learners in this study expected from the beginning to be able to utilize the chat room in ways that suited them, rather than being confined to specific language topics, tasks and structures. This finding explained the learner behavior that had previously been observed within their discourse communities. Learners also put forth a number of recommendations that can inform pedagogical uses of synchronous CMC in foreign language classes.

Although learners and the teacher consistently reported learner fluency as a benefit of chatting, neither the learners nor the teacher pinpointed specific language structures or lexical items that they felt were learned in the chat room context. Thus, this study attempted to make no claims regarding a direct connection between chatting and learning specific features of the L2.

Focusing on the Spanish verbal morphology system, a complicated system for L1 English speakers whose language does not have very many verb inflections, changes in learner output were looked at over two four-week intervals in Research Question 5 of the study. An interesting finding here was that a popular topic elicited a notably larger quantity of language (and hence, verb) production than a topic that was not as popular. This finding was triangulated in the learner perceptions data, where learners indicated what their favorite and least favorite topics were.

Another major finding regarding verbal morphosyntax in learner output was that learners utilized the infinitive and present forms extensively, making relatively limited use of the other tenses of the Spanish verbal system. Using the instructor's profile of verb use as a baseline, it was noted that the instructor used non-present tenses 25-27% of the time, whereas the learners used non-present tenses 10-16% of the time. From these figures it appeared (and also the researcher noted in the transcripts) that learners overgeneralized the present tense, using it in obligatory contexts for other tenses.

Finally, three learners were profiled more closely to illustrate their differential use of the various Spanish verb forms. The emergent grammar perspective was brought into the analysis of learner verb use to make an argument for a conceptualization of grammar use that agrees with the tenets of sociocultural theory. The discussion of emergent grammar argued that learners in this study were able to make extensive use of their L2 grammatical system, however much or little their system reflected that of the native Spanish speaker's system. The implications of this argument are that since grammar systems are in constant states of change, then perhaps the overall concept of "grammar" can be reconceptualized to describe grammatical repetitions used by a communicator as they are rather than as they should be compared to an idealized fixed, closed set of grammar rules. For the learners in this study, for example, their emergent grammar is likely to continue to change, but it may or may not approximate that of the native speaker of Spanish. This does not mean, however, that these learners are defective communicators in Spanish, or that they should not be engaged in discourse before their grammar becomes more native-like. This study has lent some preliminary empirical data to the exploration of the emergent grammar concept.

Implications and Recommendations for Foreign Language Pedagogy

Research on synchronous CMC in L2 learning is still very much in its infancy, and much more research remains to be done. Nevertheless, several pedagogical implications can be gleaned from studies on synchronous CMC such as this study. First of all, synchronous CMC is a useful forum of communication, in addition to that of the classroom, in which learners can interact with each other in their L2. Synchronous CMC should not be seen as a substitute for classroom communication, but rather an extension of it. In the chat room context, learners have an opportunity to utilize certain language functions which are not often part of the L2 classroom environment. The groups in this study, for example, had the opportunity to use their L2 to express social cohesion or group belonging, including (extensive) greetings and leave-takings, experimenting with alternate identities and role plays, and humoring and insulting each other. All of these language functions can be considered an important part of sociolinguistic competency. As the typical L2 classroom environment does not provide extensive opportunities for these types of language use, the chat room environment can pick up this slack and therefore complement classroom instruction. The chat room environment could even be exploited as a forum in which learners are given the opportunity to utilize and practice communicative strategies that help them keep a conversation going.

Another pedagogical recommendation for the use of synchronous CMC in L2 classes is to experiment with the types of groups that are placed into the chat room context. In this study, for example, it was widely recognized by both the learners and the instructor, that the teacher does not necessarily have to be present in the chat room with learners. This study has shown that learners of L2 Spanish, at least at the intermediate level, are quite capable of maintaining interaction in Spanish on their own, without the assistance of the teacher. For teachers who worry about issues of language accuracy, they could utilize chat room transcripts in the classroom for individualized grammar lessons. This would promote a focus on form and would be another way to integrate the chat room activity with the overall goals of the course. On the other hand, it may be beneficial to have larger numbers of native or proficient speakers of the L2 present in the chat rooms with learners. At some point in the mediation process, an expert is needed to guide learners along their ZPD. Bringing native speakers into the chat rooms could bring about types of discourse and language learning that might not br brought about in the absence of a native speaker. For example, the native speaker can serve as a model for correct language form, as well as a cultural informant from whom the learners can learn interesting aspects of the target culture(s).

A third area in which it would serve L2 teachers well to experiment is with the types of tasks that are assigned to the chat room discussions. This study has suggested that learners benefit in terms of overall fluency when they have more communicative autonomy than when they have less communicative autonomy. There are endless types of language tasks that could be assigned for chat room discussions, however, and individual teachers should experiment with task design in order to discover what types of tasks work best for their learners. If specific structured tasks are assigned, then perhaps the topic and task should be introduced in the classroom prior to the chat session, providing activities and grammatical and/or lexical support that would activate the learners' focus on the topic (much like the way pre-reading exercises are used to introduce a reading passage).

A fourth pedagogical recommendation is to begin experimenting with synchronous CMC at lower levels of L2 instruction, as well as to continue its use throughout advanced instruction. This study involved fourth semester students of Spanish. The researcher also utilized synchronous CMC in his own section of elementary Spanish concurrently with this study, and found a very different set of circumstances. Beginning L2 students also stand to benefit from using synchronous CMC, provided that they are given appropriate topics and tasks, just as is the case with intermediate learners.

In the same vein, synchronous CMC could and should be used in advanced levels, with the same pedagogical principles in mind.

A fifth pedagogical recommendation has to do with the use of chat room transcripts. Transcripts of chat sessions constitute physical and permanent evidence of the interaction that occurs in chat sessions. In addition to using chat transcripts as individualized grammar lessons, as mentioned above, the transcripts can be exploited in a number of other useful ways. They can be used, for example, to aid in the selection of course content and personalized classroom activities, which would provide a more learner-centered language course and curriculum. They can also be used to track learner development throughout an entire semester or during several semesters.

Finally, it is recommended that instructors inform themselves of the literature on synchronous CMC in order to make the best pedagogical decisions on how to implement this medium into their particular curriculum. It is important, for example, to be aware of how synchronous CMC is fundamentally different from classroom interaction. Instructors who decide to implement synchronous CMC in their classes without informing themselves about available research, for example, might be initially surprised to find that electronic communication is often quite informal, abbreviated, and otherwise adulterated, as compared to oral conversation and writing. Being aware of research findings on synchronous CMC can help instructors to make the most informed decisions about how to utilize this medium to enhance their L2 courses.

Strengths and Limitations of the Study

One strength of this study was its employment of several research questions to illuminate the synchronous CMC phenomenon from different perspectives. The use of chat room transcripts coupled with discourse analysis, as well as questionnaires and interviews for an emic perspective, allowed for data triangulation, or connections to the data from multiple perspectives. In putting the various research components of the study together, the consumer of this study is armed with a detailed account of the mediational nature of synchronous CMC in the intermediate Spanish classroom environment. Another strength of the study was the use of interrater coding to verify the researcher's interpretation of data. In the absence of statistical analysis, interrater coding serves to reinforce the researcher's judgements in qualitative data analysis.

A limitation of this study is its external generalizability. In accordance with the case study approach to qualitative research, the particular social context of the participants in the study were fundamental in constructing the analyses of the research objectives established for the research project. Consumers of this study can use the description of the research context in order to determine to what extent they might generalize the findings to their particular context.

Another limitation has to do with the participants in the study. This study was conducted in a foreign language, rather than second language environment, among learners who possessed the same native language and culture. The findings might have been very different, had the study been conducted in a research context in which the learners had different cultural and linguistic backgrounds, as well as in a setting in which the language being studied is the dominant language of the surrounding community.

Further Research

There are several avenues to pursue for further research on synchronous CMC in L2 learning. First, more studies in other L2 and foreign language contexts are needed to analyze learner language use in synchronous CMC within these other contexts.

Second, additional studies should analyze further the types of tasks that can be utilized in the CMC environment. This study limited itself to one particular type of structured communicative task, with an open-ended task as a research variable. As important as the concept of task is to current pedagogical trends, additional research on task type in CMC would fortify knowledge gleaned from existing studies.

A third future research endeavor would be to research synchronous CMC within groups of varying numbers of learners. Discourse analysis of dyads in CMC, for example, would shed light on a series communicative factors that might not apply to groups of three or more. For example, turn-taking and topic continuation is likely to be quite different with only two interlocutors.

Finally, another fruitful area for further research would be analyses of chat room communication with more native speakers or proficient learners present, to find out more about the effect of proficient speaker communication on learner communication. To that end studies could be set up between learners in one target language country and learners in another, so that each set of learners gets language practice with native speakers of the other language. This would also open opportunities for exchange of cultural information among learners.

Summary

This study has put forth a variety of findings on the use of synchronous CMC in the intermediate foreign language class. It has shown that sociocultural theory is a robust framework within which to analyze communication in the synchronous CMC medium. It has also contributed empirical knowledge to research in SCT and CALL. Following the mediation and psychological tool metaphor, the study has illustrated how a new tool can effect learners, the teacher and the overall learning environment. New tools are often developed at points in time in which historical conditions are changing. We are currently at a point in human history that computers are a fundamental part of nearly every aspect of human existence. Synchronous CMC is one application of the computer as a tool, in which different communicative functions are combined in new ways (i.e., reading and writing that is interactive in real time), which qualitatively transforms the communication process.

Donato and McCormick (1994) point out that in the mediation process, initially unfocused learning actions may become adjusted and modified, based on how learning the language is mediated. This study has shed light on the ways that synchronous CMC mediated the language learning of two groups of intermediate Spanish learners, promoting the adjustment and modification of their learning in the process. Synchronous CMC is a new medium that presents a new set of learning challenges. It is hoped that this study will inspire further research on synchronous CMC in foreign language classes, in an endeavor to elaborate a theoretical model of CMC within L2 development. More research is necessary to inform both SLA theory and foreign language pedagogy.

APPENDICES

APPENDIX A

Participant Consent Form

TO THE SPANISH IV STUDENT:

Mark Darhower, of the Department of Hispanic Languages, is conducting research this semester in University of Pittsburgh Spanish IV sections. We request your permission to include you as a participant in a study about foreign language learning. You are encouraged, but not required, to participate in this study which seeks to inform and improve Spanish instruction at Pitt, and foreign language teaching and learning in general.

Participants in the study will be asked to agree to the following terms:

1) Participants must agree to provide general background information relating to their foreign language experiences.
2) Participants must agree to grant the researcher access to the transcripts of the weekly chat room sessions to be held in class.
3) Participants must agree to complete a learner questionnaire at the end of the study.
4) Participants must agree to a short interview with the researcher at the end of the study, if the researcher needs additional information beyond the questionnaire.

The following research guidelines will be observed:
1) Participation is voluntary.
2) You may withdraw from the study at any time by notifying the researcher in writing.
3) All information will remain confidential, i.e., you will not be identified in any way in the research write-up.

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Pittsburgh, PA 15260

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E-mail: darhower@pitt.edu

I have read and understand the information on the form, and I consent to participate in this study. I understand that I have the right to withdraw from the study at any time by notifying the researcher in writing.

Name (Please Print) ______________________________ Date ____________

Signature ____________________________________ Phone ___________

APPENDIX B

Pre-study Teacher Interview Questions

1. What do you feel is your role in classroom conversation with your students?

2. What are your goals for your learners when you engage them in classroom tasks?

3. Now that you know what conversing in a chat room entails, how do you anticipate that this mode of communication may be useful to intermediate Spanish learners such as the ones in your classes?

4. What do you see as potential disadvantages to using chat in an intermediate Spanish class such as yours?

5. Do you have any questions for me before we begin the study?

APPENDIX C

Learner Questionnaire

Please answer the following questions frankly and as completely as you can. Write your pseudonym on the questionnaire, so that the researcher can ask you for additional information, if necessary. Remember that your participation in the research study, including your answers to this questionnaire, **will in no way affect your grade**. Your honest input on this questionnaire is extremely important to the analysis of study data. If you are uncertain about any particular question, please ask the researcher. The Department of Hispanic Languages and Literatures thanks you for participating in this research project!

A. Participant Information.

Name: ____

Phone Number/E-mail: ______________________________

Class standing: freshman sophomore junior senior other

Reasons for taking Spanish 0004:

____

____

Interest level in the Spanish language:

5 I am extremely interested in learning/becoming fluent in Spanish.
4 I am very interested in learning/becoming fluent in Spanish.
3 I am somewhat interested in learning/becoming fluent in Spanish.
2 I am not very interested in learning/becoming fluent in Spanish.
1 I am not at all interested in learning/becoming fluent in Spanish.

Please explain if you have any particular reason for your above selection (i.e, married to a Spanish speaker, need Spanish for your career, had to take Spanish for a requirement).

____

____

Experience in use of computers (choose one).
5 I am very experienced at using computers for a variety of purposes (please list them).
____
4 I use computers rather often.
3 I use computers occasionally.
2 I do not use computers very often.
1 I almost never use a computer.

Comfort with computers (choose one).
5 I am extremely comfortable with computers.
4 I am very comfortable with computers.
3 I am somewhat comfortable with computers.
2 I am not very comfortable with computers.
1 I am uncomfortable with computers and do not like to use them.

Had you ever participated in an Internet chat before the study? If so, in English, Spanish, or both?

B. Answer with one of the following: (5) strongly agree; (4) agree; (3) neutral/no opinion; (2) disagree; (1) strongly disagree.

______ 1. Communicating in the chat room is a good way to improve my Spanish.
______ 2. The time we spent in the chat room could have been used more productively as standard class discussion time.
______ 3. Most of the discussions were superficial.
______ 4. Reduced amount of feedback from the instructor was a drawback.
______ 5. Being able to enter comments into the discussion at my own pace was an advantage.
______ 6. Students were more frank and forthcoming about themselves and their opinions during the chat sessions than during regular class discussions.
______ 7. Being assigned a specific task helped guide chat discussions.
______ 8. Not being assigned a specific task (i.e., just a topic) allowed for more interesting conversation.
______ 9. The best students dominated the chat sessions just as much as regular in-class discussions.
______ 10. It was difficult to read everything that everyone wrote.
______ 11. The chat sessions were a welcome change from the usual classroom routine.

If you have any comments about the items above, please enter them here.

C. Open-ended questions.

1. What did you like the most about the chat sessions?

2. What did you like the least?

3. What specific aspects of chatting, if any, helped you to improve your skills in Spanish?

4. Were there any aspects of the chat sessions that were unhelpful?

5. What did you think about using a pseudonym to participate in chat sessions? Was it a good thing or bad thing, and why?

6. Did you know who your fellow chatters were, in spite of the pseudonym? Did knowing or not knowing make any difference in your communication with them?

7. Did you make use of dictionaries, translation machines, verb charts, the textbook, or other individuals during your chat sessions? Please mention what you used and how/if this was helpful to you.

8. How did you feel about the time that your group was off-task in the chat room? Did you enjoy talking about whatever you wanted to, instead of adhering to the assigned topic? Did you feel that off-task discussion was more interesting? Can you think of any way that off-task discussion could be helpful to your learning of the Spanish language?

9. Did you notice any differences in your **tasks** (other than different topics) from week to week? If so, what was the difference? If there was a difference, which format did you prefer and why?

10. Did you have any preference as to whether or not the instructor was in your chat room? Why or why not?

11. Did you ever scroll back to read previous text in a conversation? If so, for what purpose?

12. If you chose to carry on other activities during chat sessions, such as read e-mail, talk to classmates about non-related subjects, do homework for other classes, read the newspaper, write notes/letters to friends or family members, or surf the Internet, what were your reasons for carrying on such activities, rather than focusing your attention on the chat session?

13. Please place an "X" on the line beside each of the following chat sessions that you attended. Then rank the two that you liked the most (put #1 and #2 on the lines) and the two you liked the least (and #9).
Explain your choices in the area to the right of the topic list.

_______ 1. La libertad

_______ 2. La censura

_______ 3. El sexismo

_______ 4. El cine

_______ 5. La música

_______ 6. El matrimonio

_______ 7. Escándalos de la familia

_______ 8. Los animales

_______ 9. El futuro

14. Can you think of any grammar structures or vocabulary words that you learned in the chat sessions? From whom did you learn them?

15. Do you feel that your writing in Spanish has changed in any way from the beginning to the end of the study? If so, in what ways?

16. Is there anything else that you would like to tell the researcher about your experience with the chat research study?

Thank you for your participation!

APPENDIX D

Instructor Questionnaire

Please answer the following questions frankly and as completely as you can. Your honest input on this questionnaire is extremely important to the analysis of study data. If you are uncertain about any particular question, please ask the researcher.

A. Instructor Information

Name: ______________________________

Number of years you have taught college-level Spanish: ____________________

What levels have you taught? ______________________________________

B. Answer with one of the following: (5) strongly agree; (4) agree; (3) neutral/no opinion; (2) disagree; (1) strongly disagree.

_____ 1. Communicating in the chat room is a good way for students to improve their Spanish.
_____ 2. The time we spent in the chat room could have been used more productively as standard class discussion time.
_____ 3. Most of the discussions were superficial.
_____ 4. Reduced amount of feedback from the instructor was a drawback in the chat sessions.
_____ 5. Students were more frank and forthcoming about themselves and their opinions during the chat sessions than during regular class discussions.
_____ 6. Being assigned a specific task helped guide chat discussions more than having an assigned topic with no task.
_____ 7. The best students dominated the chat sessions just as much as regular in-class discussions.
_____ 8. Not assigning a specific task (i.e., just a topic) allowed for more interesting conversation.
_____ 9. It was difficult to read everything that everyone wrote.
_____ 10. The chat sessions were a welcome change from the usual classroom routine.

If you have any comments about the above items, please enter them here.

C. Open-ended questions.

1. What did you like the most about the chat sessions?

2. What did you like the least?

3. What specific aspects of chatting, if any, do you think may have helped learners to improve their skills in Spanish?

4. Were there any aspects of the chat sessions that were unhelpful or difficult?

5. What did you think about learners' use of pseudonyms to participate in chat sessions? Was it a good thing or bad thing, and why?

6. Do you think that learners' knowing or not knowing who they were made any difference in their communication with each other?

7. How did you feel about the time that learners were off-task in the chat room?

8. Did you prefer the structured task or the open-ended task when communicating with learners in the chat rooms? Why?

9. How did you feel about not being able to spend a great deal of time with each individual group?

10. Did you ever scroll back to read previous text in a conversation? If so, for what purpose?

11. Please rank the two topics below that you liked the most (put #1 and #2 on the lines) and the two you liked the least (and #9). Explain your choices in the area to the right of the topic list.

_______ 1. La libertad

_______ 2. La censura

_______ 3. El sexismo

_______ 4. El cine

_______ 5. La música

_______ 6. El matrimonio

_______ 7. Escándalos de la familia

_______ 8. Los animales

_______ 9. El futuro

12. Can you think of any grammar structures or vocabulary words that you think learners might have learned in the chat sessions? From whom did they learn them?

13. Do you feel that learners' writing in Spanish changed in any way from the beginning to the end of the study? If so, in what ways?

14. Is there anything else that you would like to tell the researcher about your experience with the chat research study?

Thank you for your participation!

APPENDIX E

Schedule of Data Collection

Week	Topic
Week 1: Oct. 1	la libertad (*freedom*)
Week 2: Oct. 8	la censura (*censorship*)
Week 3: Oct. 15	el sexismo (*sexism*)
Week 4: Oct. 22	el cine (*movies*)
Week 5: Oct. 29	la música (*music*)
Week 6: Nov. 5	el matrimonio (*marriage*)
Week 7: Nov. 12	escándalos de la familia (*family scandals*)
Week 8: Nov. 19	los animales (*animals*)
Week 9: Dec. 3	el futuro (*the future*)

APPENDIX F

Weekly Tasks

Sesión de "Chat" #1: La libertad
Grupos 1-3

Actividad A
Paso 1: Conéctense a Netscape y entren a su cuarto asignado.
URL: http://mlonline.hss.cmu.edu:8000/webct/public/show_courses.pl
"Other courses" - "Spanish Chat Research" - "cuarto 1-2-3-4"

Paso 2: Piensen en su discusión de la libertad en la última clase. ¿Cómo definieron la libertad? ¿En qué consiste la libertad? En el cuarto de chat, compartan su definición de la libertad e indiquen si están de acuerdo con las definiciones de sus compañeros de clase.
Para mí, la libertad...
En mi opinión la libertad...

Paso 3: Hagan una lista de libertades que esperarían ver en una constitución nacional, por ejemplo la constitución de los Estados Unidos. Por ejemplo: *libertad de prensa, libertad de expresión* artística, etc.

Paso 4: Abran otra ventana en Netscape y vayan al URL:
http://espanol.yahoo.com/Politica_y_gobierno/Derecho/Constitucional/
Cada persona del grupo debe escoger un país de la lista de constituciones (mencionen en el chat qué país han escogido). Busquen en la constitución las libertades que garantiza para los ciudadanos del país.

Paso 5: En el chat, mencionen las libertades que han encontrado en la constitución de cada país. [*Según la Constitución de Venezuela, los ciudadanos tienen derecho a...*]
¿Cuántas libertades encontraron de su lista del paso 3?

Paso 6: ¿Cómo comparan los varios países en cuanto a libertades garantizadas a los ciudadanos?
¿Cómo comparan estas libertades con las ofrecidas en EEUU? ¿Les parecen adecuadas las libertades? ¿Hay alguna libertad que falta, en su opinión? ¿Están de acuerdo con todas las libertades dadas?¿Les gustaría vivir en estos países? ¿Por qué sí o no?

Sesión de "Chat" #1: La libertad
Grupo 4

Los miembros del grupo deben conversar sobre la libertad. Pueden discutir cualquier aspecto de la libertad que les interese. Por ejemplo, pueden hablar de las libertades que hay en Estados Unidos versus otros países (URL "http://espanol.yahoo.com/Politica_y_gobierno/Derecho/Constitucional/" tiene constituciones de varios países de Latinoamérica).

Deben mantener la conversación hasta el final de la clase. Si necesitan más ideas de que hablar, las pueden buscar en la lección 17 de ¿Qué te parece?

Sesión de Chat #2
Grupos 1-3

¿Qué te parece...? página 262, Actividad E: ¿Se debe censurar...?

Paso 1: Escojan unos ejemplos que les interesen de la la lista del paso 1. En el chat, discutan sus razones por querer o no querer publicar el nombre de la persona.

Paso 2: Piensen en el escándalo del presidente Clinton y Mónica Lewinsky. ¿Creen que se debió televisar todos los detalles del caso? Tiene el público el derecho de saber los detalles de la vida privada del presidente? ¿Por qué sí/no? ¿Pueden pensar en otros escándalos de personas famosas que han sido publicados (por ejemplo el caso de Woody Allen)?

Paso 3: Refiéranse a las preguntas de "¿Qué te parece?". Comenten los aspectos des estas preguntas que les interesen, si es que estos puntos no han surgido todavía en su conversación.

Paso 4: En el tiempo que queda, ¿pueden llegar a algún acuerdo en cuanto a la censura? ¿Cuándo es aceptable censurar y cuándo no es aceptable? Por qué?

Grupo 4

La censura

Actividad:

En su cuarto de chat, comenten sus opiniones acerca de la censura. Den ejemplos. Pueden hablar de cualquier aspecto de la censura que les interese. Discutan sus opiniones con sus compañeros en el chat.

Sesión de "Chat" #3: El sexismo

Grupos 2-4

Paso 1: Después de leer el cuento "La princesa vestida de una bolsa de papel", mencionen los aspectos del cuento que lo diferencian de un cuento de hadas tradicional.

Paso 2: Expongan una definición de "sexismo". Luego, discutan con sus compañeros los elementos de sexismo en el cuento. ¿Les gustaron las actitudes y las acciones de los protagonistas? ¿Por qué sí/no?**¡Ojo! Si quieres expresar duda, se requiere el subjuntivo: No creo que el dragón *sea* tan inteligente como la princesa**.

Paso 3: Después de discutir el cuento, mencionen ejemplos de comportamientos y/o actitudes sexistas en la sociedad en la que vivimos. Piensen en varios aspectos de la vida: la casa y la familia, el trabajo, la educación, la política. ¿Qué opinan de estas situaciones? **¡Ojo! Si quieres expresar voluntad (volition), se requiere el subjuntivo: No se debe prohibir que las mujeres *practiquen* fútbol americano profesional.**

Paso 4: Terminen su conversación con un resumen de las ideas expresadas. ¿Realmente hay mucho sexismo en nuestra sociedad actual? ¿Es necesario mejorar la situación? ¿Cómo?

Grupo 1

Actividad:

Después de leer el cuento "La princesa vestida de una bolsa de papel", discutan con sus compañeros en el chat los elementos de sexismo en el cuento y en la sociedad en general. Pueden hablar de los aspectos de sexismo que más les interesen.

Sesión de "Chat" #4: El Cine
Grupos 1, 2, 4

Paso 1: Después de haber visto información sobre el cine en "Yahoo en español", piensen en una película que han visto ultimamente (puede ser una película que aparece en Yahoo, o cualquier película). Mencionen las películas en el chat. ¿Han visto alguna película en español?

Paso 2: Cada persona debe describir una película que las otras personas no hayan visto. Hablen brevemente sobre los personajes y lo que pasó en la película. Los otros deben hacer preguntas si necesitan clarificación o información adicional. **¡Ojo! Tengan cuidado con el uso del pretérito y del imperfecto cuando describen la película y hablan de lo ocurrido en la película.** [El protagonista **era** una persona muy amable (imperfecto). **Se enamoró** de una persona antipática (pretérito).] Si alguien ha visto una película en español, debe comentar las diferencias entre esta película y las películas de Hollywood.

Paso 3: Después de que todos hayan descrito una película, mencionen si les gustó la película que vieron o no, y por qué.

Paso 4: Hablen sobre el papel del cine en la sociedad contemporánea. ¿Por qué se filman las películas? ¿Por qué va la gente al cine o alquila películas en video? ¿Cuáles son los aspectos positivos y negativos del cine en la sociedad? Pueden mencionar, por ejemplo, aspectos psicológicos, sociales, económicos, etc.

Paso 5: Comenten su opinión en cuanto a cómo sería la sociedad actual si el cine no existiera. Cuidado con el uso del condicional y el imperfecto del subjuntivo. [Si el cine no **existiera** (imperfecto del subjuntivo), la sociedad **sería** (condicional) muy aburrida.] Mencionen aspectos positivos y negativos. ¿Están de acuerdo con sus compañeros de clase?

Paso 6: Cada persona debe resumir su opinión general del cine en la sociedad. ¿Han cambiado sus ideas como resultado de la conversación de hoy?

Grupo 3

Después de haber visto información sobre el cine en "Yahoo en español" (http://espanol.yahoo.com - espectáculos - cine - películas), conversen en el chat sobre el cine en la sociedad actual. Pueden hablar de sus películas favoritas, por ejemplo, y de los aspectos positivos y negativos del cine en la sociedad.

Tengan cuidado con el uso del pretérito versus el imperfecto, si hablan de lo que ocurrió en una película.

Sesión de "Chat" #5: La musica
Grupos 1, 3, 4

Paso 1: Después de leer "La reina rumba habla de la salsa", comenten sus impresiones del artículo en el chat. ¿Qué aprendieron de la música caribeña? ¿Cuáles son las varias influencias que se notan en este tipo de música? ¿De qué manera representa la música salsa a la cultura caribeña?

Paso 2: Comenten las clases de música que más les gustan a Uds. Describan lo que les gusta de estas clases de música...los cantantes, los instrumentos, canciones favoritas, lo que les hace sentir, etc.

Paso 3: Hablen de la importancia de la música en la vida diaria. ¿Para qué sirve la música en nuestras vidas? ¿Cuáles son algunas emociones que puede provocar la música, por ejemplo?

Paso 4: Imagínense cómo sería el mundo si no existiera la música y comenten sus opiniones.
¡Ojo! Cuidado con el uso del condicional y el imperfecto del subjuntivo. [Si la música no **existiera** (imperfecto del subjuntivo), la sociedad **sería** (condicional) muy aburrida.]

Paso 5: Después de conversar sobre los varios aspectos de la música, resuman sus posturas en cuanto la música: resuman por qué la música es o no es muy importante para Uds., y por qué.

Grupo 2

Actividad: Después de leer "La reina rumba habla de la salsa", comenten sus impresiones del artículo en el chat. Después, hablen sobre la importancia de la música para Uds. y para la sociedad en general. Pueden hablar de cualquier aspecto de la múscia que les interese.

Sesión de "Chat" #6: El matrimonio
Grupos 1, 2, 4

Actividad:

Paso 1: Después de haber visto el Show de Cristina llamado "Esposas detectives", comenten el matrimonio de Moisés y María, y el de Lizzy y Antonio. ¿Que ha pasado entre Moisés y María, y entre Lizzy y Antonio? ¿Por qué están en el Show de Cristina? ¿Que quieren estas personas de su pareja? ¿Qué opina Cristina del asunto? ¿Qué opinan los miembros del público? ¿Qué sugiere Cristina que hagan? **¡Ojo! Cuando se habla de sugerencias, recomendaciones o deseos, se usa el subjuntivo.** [Cristina **sugiere que se comuniquen** mejor el uno con el otro.] [Moisés **quiere que María deje** de vigilarlo.]

Paso 2: Cada persona debe resumir para los demás su fragmento asignado del documento "Los esposos: los ajustes iniciales y algunos problemas comunes" (URL http://anabaptists.org/spanish/esposos.html). ¿Cuáles son algunos ajustes iniciales en el matrimonio? ¿Qué importancia tienen los hábitos en un matrimonio? ¿Cuáles son algunos problemas comunes en los matrimonios? ¿Cuál es la orientación de este artículo? O sea, ¿es formal o informal? ¿Educativo o cómico? ¿Religioso o laico (secular; not relating to religion in any way)? ¿Están Uds. de acuerdo con los contenidos del articulo? ¿Por qué sí/no? ¡Ojo! Cuando se expresa desacuerdo, se usa el subjuntivo. [**No creo que sea** necesario vivir según la Biblia].

Paso 3: Basándose el los contenidos de "Los esposos", expliquen los errores en el matrimonio de Moisés y María y de Arturo y Lizzy. ¿Cuáles son las reglas del matrimonio que estas parejas no obedecen? ¿Creen que sus matrimonios serían más exitosos si siguieran estas reglas? ¿Por qué sí/no?

Paso 4: Piensen en algunas parejas (que están casados o que viven juntos) que conocen y describan su relación. Pueden ser sus padres u otros parientes, o amigos. ¿Son matrimonios exitosos o no? ¿Por qué? ¿Conocen a alguien que se comporte como las personas del Show de Cristina? ¿Conocen a alguien que tenga un matrimonio exitoso como lo que está descrito en el artículo?

Paso 5: Para terminar esta conversación sobre los matrimonios/las relaciones, opinen sobre su idea del matrimonio/la relación ideal. ¿Cómo es su relación ideal? ¿Qué piensan hacer para que su relación sea exitosa?

Grupo 3

Actividad: Comenten y opinen sobre cualquier aspecto de lo que vieron en el Show de Cristina llamado "Esposas detectives. Hagan lo mismo con el artículo "Los esposos: los ajustes iniciales y algunos problemas comunes".

Sesión de "Chat" #7: Escándalos de familia
Grupos 1-3

Actividad:

Paso 1: En el cuento "El trabajito de Carmencita", ha habido un escándalo en las familia descrita. Expliquen el escándalo de la familia de Carmencita.

Paso 2: Den sus opiniones en cuánto a la familia de Carmencita. ¿Cuál fue la reacción de los diferentes miembros de la familia ante el problema?, ¿Quién tiene la culpa? ¿Qué recomiendan Uds. para que esta
familia resuelva sus problemas? **!Ojo! Cuando se hace una recomendación, se usa el subjuntivo!** [Recomiendo que el padre de Carmencita **sea** más comprensivo. Sugiero que los padres de Carmencita le **presten** más atención].

Paso 3: Piensen en sus propias familias. ¿Cómo reaccionarían los miembros de sus familias si ocurriera un escándalo como el de Carmencita? Comenten cómo reaccionarían sus familiares si Uds. hicieran algunas de las siguientes cosas (sería un escándalo tremendo, moderado o mínimo?):
!Ojo! Será necesario usar el condicional y el imperfecto del subjuntivo para expresar situaciones hipotéticas.
1) casarse con alguien de otra raza, país o religión; 2) cambiarse radicalmente el pelo
3) abandonar la carerra universitaria; 4) tener un hijo sin estar casado/a
5) cambiarse de sexo; 6) hacerse drogadicto/a
7) recibir una multa por conducir borracho; 8) tatuarse
9) decirle a su familia que Ud. es homosexual

Paso 4: Después de haber conversado acerca de las situaciones hipotéticas mencionadas, escojan una de ellas y hagan una actuación ("role play"). Cada persona debe hacer el papel de una persona de la familia y deben discutir su problema como si fuera un problema de su propia familia. Una persona puede hacer el papel de Cristina, intercediendo entre los familiares. [Do a role play as if you were members of one of the families you discussed. Each person should act out the role of one family member and one person can play the role of Cristina, mediating the family discussion.]

Grupo 4

Actividad:
Después de haber leído "El trabajito de Carmencita", conversen acerca de los escándalos de esta familia. Pueden hablar de cualquier aspecto del escándalo, dando sus opiniones, sugerencias para las familias, historias personales de escándalos en las familias de Uds, etc.

Sesión de "Chat" #8: "Los animales"

Grupos 1-2

Actividad:
Después de haber visto el "Show de Cristina" llamado "Mascotas de los famosos", conversen acerca de los animales. Pueden hablar de cualquier aspecto de los animales, por ejemplo, los animales que vieron en el programa, las mascotas, los animales en la sociedad, etc.

Grupos 3-4

Actividad:

Paso 1: Después de haber visto el "Show de Cristina" llamado "Mascotas de los famosos", hablen de lo que más les impresionó del programa. ¿Aprendieron algo de los animales que no sabían antes?

Paso 2: ¿Cuáles son las opiniones de ustedes en cuanto a los animales? ¿Les gustan los animales? ¿Por qué sí/no? ¿Cuáles son sus animales favoritos? ¿Tienen mascotas en casa? ¿Cómo son sus mascotas? ¿Cuáles son las razones por las que la gente tiene mascotas en su hogar?

Paso 3: Piensen en los animales y la sociedad. Por ejemplo, ¿cómo se trata a los animales eb nuestra sociedad? ¿Se los trata bien? ¿Mal? ¿Por qué? ¿Cuáles son las características de las personas que tratan bien a los animales? ¿Y las que maltratan a los animales? ¿Hay problemas con los animales en la sociedad?

Paso 4: Después de terminar el paso 3, deben dar un resumen de sus opiniones acerca de los animales, a base de su reciente discusión.

Sesión de "Chat" #9: El futuro
Grupos 1-2

Actividad:

Paso 1: En el "Show de Cristina" llamado "Predicciones del siglo XXI", el famoso astrólogo Walter Mercado hizo varias predicciones del mundo del próximo milenio. Habla de tus opiniones en cuanto a la astrología. ¿Crees en los signos del horóscopo y las predicciones astrológicas? ¿Por qué sí/no?

Paso 2: ¿Cuáles son tus predicciones del futuro? Discútelas con tus compañeros de clase. ¿Tienen predicciones similares? ¿En qué basaron sus predicciones? ¿En la ciencia? ¿Creen que el mundo va a desaparecer como muchas personas han estado diciendo últimamente? ¿Por qué sí/no? **¡Ojo! Será necesario usar el tiempo futuro o *ir + a + infinitivo* para hacer predicciones del futuro [Los carros volarán para el año 2075; Las clases se van a dar a través de la Internet para el año 2100]**.

Paso 3: Después de que todos hayan dado sus predicciones del futuro, traten de llegar a un acuerdo (agreement) en cuanto al mundo del futuro. Si algunos compañeros no están de acuerdo con tus ideas, defiéndelas (las ideas) y trata de convencer a tus compañeros.

Grupos 3-4

Actividad: Después de haber visto el "Show de Cristina" llamado "Predicciones del siglo XXI", habla de tus impresiones del programa y de tus propias predicciones para el futuro.

APPENDIX G
Sample Spanish Verb Conjugation (From 501 Spanish Verbs)

hablar Gerundio **hablando** Part. pas. **hablado**

to talk, to speak

The Seven Simple Tenses		The Seven Compound Tenses	
Singular	Plural	Singular	Plural
1 presente de indicativo		8 perfecto de indicativo	
hablo	**hablamos**	**he hablado**	**hemos hablado**
hablas	**habláis**	**has hablado**	**habéis hablado**
habla	**hablan**	**ha hablado**	**han hablado**
2 imperfecto de indicativo		9 pluscuamperfecto de indicativo	
hablaba	**hablábamos**	**había hablado**	**habíamos hablado**
hablabas	**hablabais**	**habías hablado**	**habíais hablado**
hablaba	**hablaban**	**había hablado**	**habían hablado**
3 pretérito		10 pretérito anterior	
hablé	**hablamos**	**hube hablado**	**hubimos hablado**
hablaste	**hablasteis**	**hubiste hablado**	**hubisteis hablado**
habló	**hablaron**	**hubo hablado**	**hubieron hablado**
4 futuro		11 futuro perfecto	
hablaré	**hablaremos**	**habré hablado**	**habremos hablado**
hablarás	**hablaréis**	**habrás hablado**	**habréis hablado**
hablará	**hablarán**	**habrá hablado**	**habrán hablado**
5 potencial simple		12 potencial compuesto	
hablaría	**hablaríamos**	**habría hablado**	**habríamos hablado**
hablarías	**hablaríais**	**habrías hablado**	**habríais hablado**
hablaría	**hablarían**	**habría hablado**	**habrían hablado**
6 presente de subjuntivo		13 perfecto de subjuntivo	
hable	**hablemos**	**haya hablado**	**hayamos hablado**
hables	**habléis**	**hayas hablado**	**hayáis hablado**
hable	**hablen**	**haya hablado**	**hayan hablado**
7 imperfecto de subjuntivo		14 pluscuamperfecto de subjuntivo	
hablara	**habláramos**	**hubiera hablado**	**hubiéramos hablado**
hablaras	**hablarais**	**hubieras hablado**	**hubierais hablado**
hablara	**hablaran**	**hubiera hablado**	**hubieran hablado**
OR		OR	
hablase	**hablásemos**	**hubiese hablado**	**hubiésemos hablado**
hablases	**hablaseis**	**hubieses hablado**	**hubieseis hablado**
hablase	**hablasen**	**hubiese hablado**	**hubiesen hablado**

imperativo

—	**hablemos**
habla; no hables	**hablad; no habléis**
hable	**hablen**

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